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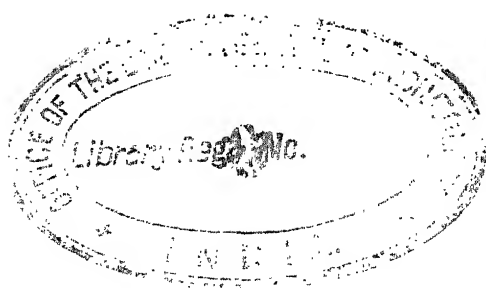
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DISCOURSES

ON

EGYPTIAN ARCHÆOLOGY

AND

HIEROGLYPHICAL DISCOVERIES.

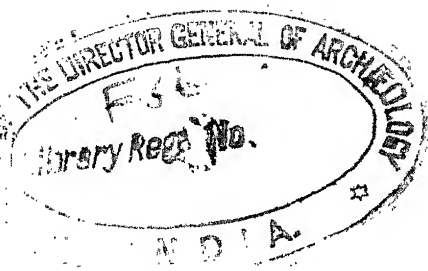


BY

GEORGE R. GLIDDON.

CANAL

Qui si fa quel che si sa
E si sa quel che si fa.



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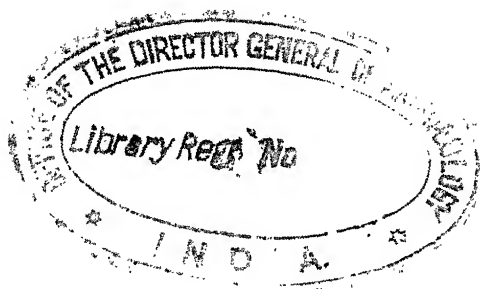
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TO THE MEMORY
OF
LETRONNE,

THESE PAGES ARE INSCRIBED BY
A GRATEFUL PUPIL.



" Non gloriosa te terrificent nomina vel antiquis seculis, vel præsenti-
bus Academiis nota,
dummodo modesta ac *verissima* pendas,"

LANCI, (" Lettera al Barone di Koller ;" Napoli, 1826.)

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PREFACE.

THE promise made to the readers of the *Ethnological Journal* having been performed, Mr. BURKE's prefatory remarks sufficiently explain the incidents that suggested, in the first instance, the periodical publication of the following digest of American editorial reports.

In compliance with the wish of my friend Mr. JAMES MADDEN, these pages are now offered in one volume to the student of Egyptology ; and I beg leave to append a few personal observations.

The Course of Lectures herein presented, originally formed part of some *thirty* discourses, distinct from each other, and comprehending the more prominent discoveries in hieroglyphical literature, of which the sub-joined *eight* are but selections. In the process of arranging the Newspaper reports for diffusion in England through the ETHNOLOGICAL JOURNAL, I became convinced that some additional Notes were indispensable : and their preparation led me insensibly into more digressions than were at first contemplated. Most of these were prompted by a local consideration.

During transient sojourns in my native land, where these studies have hitherto encountered no *popular* favor, the CUI BONO of hieroglyphical researches is a query that has fallen incessantly upon my ear ;—frequently from respected parties whose high education ought to have ranked them long ago among the most ardent of CHAMPOLLION's disciples.

As far as the facilities at my disposal permitted, I have endeavored to answer this interrogatory :—in *Notes*, pages 33 @ 42, by pointing out the inevitable overthrow, through pending *pyramidal* revelations, of

above *three hundred* systems of Chronology, (including Archbishop USHER's in our Authorized Version,) for ante-*Abrahamic* ages, heretofore based upon biblical numeration :—in *Appendix D*, by attempting to indicate, that GEOLOGICAL science amply corroborates monumental deductions :—in *Appendix G*, by submitting sundry exegetical and other facts calculated to impress antagonists with the possibility, that some of the arguments with which it is still fashionable to obstruct scientific inquiry, or to veil the light of truth, are not perhaps so unassailable as they have been made to appear :—and in a concluding *Excursus* on *Berber* subjects, while Hebraical criticism has been partially continued, a few elements for the reconstruction of early African history and geography have been glanced at which may suggest new resources to fellow-laborers.

Controversy in these matters being neither courted nor deprecated, it remains to be seen whether objections, to the general tenor of the views herein advocated, cannot be rebutted through severer analyses, or overcome by a closer grapple : because, whatever may be the popular notion still current in this country concerning the *results* of Egyptian exploration, those who really know anything about them will cheerfully subscribe to the assertion of DE SAULCY :—“ En résumé, les études égyptiennes sont partout en honneur aujourd'hui. Si elles marchent trop lentement au gré des esprits inquiets qui ne croient à une découverte qu' autant qu' elle est complète, elles marchent avec sûreté ; et chaque pas qu' on leur fait faire est assez vigoureusement empreint pour qu' il n'y ait plus à craindre que le mauvais vouloir, à défaut du temps, en puisse désormais effacer la trace.”—(“ De l'étude des Hiéroglyphes”—*Revue des deux Mondes*, 15 Juin, 1846 ; page 989.)

The circumstances under which the desultory Articles that now appear in this little book were prepared, and the effort made to keep its price within general reach, may induce the charitable reader to overlook the many typographical and other blemishes it has been found impossible to avoid. A Table of *Errata* corrects the grosser errors. No attempt has been made towards literary excellence, because the Lectures themselves are published merely as *reported* by the Press, rarely adhering to the language of the MSS. ; while everything in the *Notes* has been sacrificed to condensation. Nor will the generous critic expect that one who, taken from England to the Mediterranean at two years of age, has spent thirty-two summers out of his Father-land, during twenty-five of which the English tongue was unheard beyond a very limited circle, should not

be deficient in Anglican scholarship :—" car, s'agit il de mon style ? je l' abandonne. Veut-on s' attaquer à ma personne ? ma conscience est mon refuge. Est il question du fond de cet ouvrage ? qu' on entre en lice ; mais qu' on prenne garde aux *raisons* qu' on y apportera."—(D'OLIVET, " Langue Hébraïque restituée ;" Paris, 1815 ; *Introduction*, page 28.)

Yet, there is one topic on which I fain would dwell, did I not fear that its adequate exposition would make these preliminary remarks loom larger than the book itself.

The peruser of this sequel to my CHAPTERS of 1843, struck perchance with the indefinite length of time herein claimed for *Egyptian* history, may reasonably inquire, whether researches, founded upon the far more restricted chronology of other Nations, would yield a similar result ? I have not the slightest hesitation in replying in the affirmative ; because, if no such aggregation of the multiform data, through the critical synthesis of which the primæval history of Mankind can be rebuilt, has hitherto been *published*, this grand historical desideratum has nevertheless been achieved in *manuscript* by my excellent friend, M. HENRI VENEL, of Geneva, Switzerland.

My avocations during the last three years have been so migratory, that the *translation* of "Chronos," even with my Wife's effective and zealous co-operation, has not progressed as we hoped when the labor was undertaken ; but, inasmuch as the hundred and forty folio pages of the *English Manuscript* cover the entire ground of human history, so far as modern science has resuscitated it, from primordial epochas down to the days of CYRUS, I speak confidently in averring, that it would be difficult to point out a branch of this mighty theme which has escaped the venerable author's scrutinizing attention.

Without having availed myself, in these specifically-Egyptian investi-

* "CHRONOS.—Outline of a Grand Chronological Atlas, presenting the Parallel Histories of the *East* and the *West* ; or, a Synoptical and Synchronous Tabulation of Oriental and Occidental Events, from the earliest times to the death of Napoleon.—Based upon the latest Geological, Geographical, Ethnological, Archæological, Monumental, Biblical, and other Researches, and covering above 400 Pages, folio. Translated from the Author's original and unpublished French Manuscript, and edited, with Annotations, by GEORGE R. GLIDDON." (See APPENDIX to "*Chapters on Early Egyptian History*," &c., 1846 ; xth @ xiith editions.)

gations, of the materials contained in the magnificent performance above mentioned, it would be unjust to a gentleman, from whose herculean labors I have derived so much instruction, not to acknowledge that it is to M. VENEL's liberal teachings I am indebted for the mental classification of *each Nation's* "Place in Universal History;" accompanying this avowal with a warm tribute of my admiration and regard.

London, April, 1849.

G .R. G.

LECTURES

ON

EGYPTIAN ARCHÆOLOGY.

INTRODUCTION,

BY THE EDITOR OF THE "ETHNOLOGICAL JOURNAL."

THE subject of Egyptian Antiquities has excited for some time past, and is still exciting, intense interest among many of the highest minds of the day; but in this country, the excitement is pretty much confined within the narrow circle of Egyptian scholars themselves. The public has not partaken of it, nor has the knowledge acquired been in any degree popularized. On the contrary, the most antiquated notions still prevail amongst us; so that even in quarters otherwise well-informed, Egyptian discoveries continue to be met by objections which might have been tolerably legitimate some twenty years ago, but which are absolutely ridiculous at the present time. Strange to say, the very reverse is the case on the other side of the Atlantic. In the United States, there is no scientific subject which has, of late, excited so much interest, or on which the public is so well informed, as that of Egyptian Antiquities. And this result has been entirely produced by the energy and enthusiasm of a single mind. When Mr. Gliddon commenced his labours as a Lecturer, in the Winter of 1842, Egypt was not only a land of Darkness to the American public, but even the literary men of the country, with very rare exceptions, were entirely ignorant of the existing state of Hieroglyphical learning. This ignorance arose not from any want of curiosity or reality, but simply from the fact that American scholars are too much in the habit of deriving their knowledge almost exclusively through English channels, and they could not, therefore, be expected to have advanced beyond their teachers. Mr. Gliddon's labours, however, during six winters, have completely reversed this state of things: the public has been excited to a very unusual degree, and the learned have been induced to go directly to the fountain heads of Egyptian subjects, not only in the works of English Egyptologists, but in those also of France, Germany, and Italy. To understand the nature of this revolution, a few preliminary explanations are requisite.

The people of the United States are very favourably circumstanced, both in character and social position, for transitions of this kind. Their curiosity, literary as well as general, is proverbial. They are usually educated, have less prominent distinctions among them, either of class, or race, than most other civilized nations, and they possess besides a most extensive apparatus of cheap newspapers, and the greatest facilities for inter-

valley of the Nile ; the other, all the principal publications of the school of Champollion, with other works usually referred to in the course of the lectures.*

Once placed within a hall thus adorned, the visitor found himself in a new and magic region ; the present vanished, and the men, and the events of thirty and forty centuries back arose before his gaze. In such a scene, the most dull could not fail to be impressed, the coldest could not resist the contagion of enthusiasm. In the Lecturer himself, every thing conspired to add to this effect. In voice, manner, and appearance, Mr. Gliddon is particularly qualified to impress, as well as to attract, the sympathies of his hearers, while his earnestness and force of character give to his lectures a life and spirit which completely carry away his audience. To such an extent was this effect produced, that in every city in which he lectured, nearly all the principal newspapers contained long and detailed reports of all his lectures. We have at present before us, two large folios filled with these reports, cut out at the time, and pasted together, and they are, in the highest degree, flattering to the talents and acquirements of the Lecturer.

By these means, as well as by throwing himself unreservedly upon the sympathies of the public, Mr. Gliddon experienced every where a most favourable reception. His audiences ranged from 200 to 2000 persons, averaging in the large cities, 500 of the élite of American Society. Altogether, his lectures have been listened to by more than a hundred thousand persons, and they have been delivered over a geographical circuit of five thousand miles, comprising the cities of Portsmouth, New Hampshire, Boston, New-York, Brooklyn, Philadelphia, Baltimore, Charleston, Savannah, Richmond, Va., Columbia, Augusta, Mobile, New-Orleans, St. Louis, Cincinnati, Chillicothe, and Portland, Me. His lectures have been confined to the mere audiences, the effect produced would have been partial and evanescent, but the detailed reports in the newspapers, spread a general knowledge of the subject over the whole community, and rendered the subject a permanent moment in a great degree permanent. Besides, the publication, in a cheap form, of one of these courses has tended greatly to increase this effect.† But the indirect advan-

the Pharaohs—Plans, geographical maps, topographical charts and paintings, exhibiting the *Country and Monuments of Egypt*. In short, Diagrams of every kind, illustrating every variety of Egyptian subjects, during a period of human history far exceeding 3,000 years, and terminating with the Romans in the 3rd century A.D.

* The following are the most important names in this list of authorities : viz.,—

Abeken, Ampère, Barucchi, Biot, Birch, Böckh, Bonomi, Bunsen, Burton, Cailleaud, Champollion-le Jeune, Champollion-Figeac, Cherubini, Cullimore, De Sauley, Felix, Gazzera, Hamilton, Harmer, Harmer-Hay, Hincks, Hodgson, Horeau, Hoskins, Jomard, Jones, Lanci, Leemans, Lenormant, Lepsius, Letronne, L'Hôte, Linant, Matter, Morton, Nolan, Osburn, Parthey, Pauthier, Perring, Pettigrew, Peyron, Portal, Prisse, Prudhoe, Quatremère, Raoul-Rochette, Rosellini, Salt, Salvolini, Schwartz, Sharpe, Tattam, Taylor, Ungarelli, Vyse, Wilkinson, Young, &c., &c., &c. For the use of these works, no less than for all the facilities which have made Egyptian studies popular, the American public is indebted to the scientific liberality of Mr. R. K. HAIGHT, of New York ; whose private Archaeological Library is the only one in that country containing a complete series of the works published by the *Champollionists*.—G.R.G.

† “ Chapters on early Egyptian History, Archaeology, and other subjects connected with Hieroglyphical Literature.” New-York, March 1813 ; price 25 cents or one shilling sterling. Obtainable in London at John Wiley's, Aldine Chambers, Paternoster Row ; and at Madden, & Co.'s, Leadenhall Street. We learn that in five years this little work has reached its twelfth edition, and that 24,000 copies have been disposed of by the American Publishers.

tages of Mr. Gliddon's labours, have been of even greater consequence than the more obvious ones. The information which he has diffused on certain topics, and the works which his recommendations have caused to be widely circulated, have had an immense effect in liberating the public mind, and breaking down the religious prejudices which have been so generally mixed up with Egyptian subjects.

Such is the state of things on the other side of the Atlantic; it will be some time, we fear, before questions of Egyptian or any other archaeology will excite a similar interest in this part of the world. Here, scientific men must satisfy themselves with working laboriously, and waiting patiently, for distant results. For ourselves, we do not complain of this fate; it would be unreasonable to do so, all things considered. Neither do we complain of the tenacity with which most Englishmen cling to their several opinions. This tenacity does not spring either from illiberality on the one hand, or any obtuseness of intellect on the other, but from those high feelings of consistency, firmness, attachment and prudence, which form the basis of the national character. For ourselves, we are not prepared to admit that the educated classes of this country, are behind those of any other in genuine liberality. They appear to be so, if on certain subjects they are less prejudiced, or tolerant than the same class in some other country. In our opinion, be traced to the greater caution and inferior enthusiasm of our leading literary and scientific men. In France, Germany, and at present in America, the case is the reverse. There, the courage and enthusiasm of the learned have triumphed over evils which, here, exist only in the imaginations of the timid. There is a spirit of fairness and generosity in the English mind, which is seldom appealed to in vain, if it is to be of any use. Let the man of science appear in his true colours, let him make his love of truth and purity of intention manifest, let him show respect to the feelings and conscientious prejudices of others, and advance his own views with calmness and moderation, and he will find as much toleration in England as in any other country.

In casting our eyes over some of the reports of Mr. Gliddon's lectures given by the American papers, it occurred to us that some share of the advantages which have attended his labours among our transatlantic brethren might be transferred to the readers of the *Ethnological Journal*, by the republication of a series of these reports. Mr. Gliddon has politely and readily entered into our views, and has selected for us the reports most suited to our purpose. Those chosen, are taken from the *Pittsburgh Telegraph*, March 1847, the *Mobile Tribune*, February 1848, and the *St. Louis Era*, April 1848. Particular portions have been taken from these several sources, as each paper has not given the same amount of attention to every topic.—In several instances, Mr. Gliddon has supplied deficiencies, and added facts of interest, besides giving a number of interesting notes and references. In their present form, therefore, these reports will give a brief, but correct summary of the leading topics of Egyptian Archaeology, with all known discoveries up to the present moment. We are not aware that any similar body of information is before the British public, in a sufficiently popular form to be generally accessible and intelligible. The critical reader will of course bear in mind, that these discourses, as we here present them, are, at the best, mere synopses made by Reporters for the press, with an occasional reference to the Lecturer, or his manuscripts. It will be obvious, that they give but a very inadequate idea of the lectures themselves, when we mention that each of these occupied two hours in delivery. Still they contain a valuable body of information that may be depended upon, and many facts which the mere English reader might seek for in vain in other quarters. It is with great pleasure, therefore, that we avail ourselves of the opportunity of presenting them in

our pages ; even though we thereby somewhat depart from our general principle of publishing none but papers expressly written for the *Journal*. The series will contain *eight* lectures, three of which are now presented. The subject will be continued, in our next number, and completed in the succeeding one. Those who have already perused Mr. Gliddon's "Chapters," will find, in the present papers, several additional facts of great importance, and many improved views of chronology, etc., resulting from recent discoveries.—*L. Burke.*

LECTURE I.

Introduction : Present Position of Hieroglyphical Discoveries.

MR. GLIDDON commenced with a sketch of the actual position of Egyptological researches. He made reference to the pamphlet published by him in 1843 ;* which affording a correct historical summary of hieroglyphical discoveries from YOUNG's and CHAMPOLLION LE JEUNE's era, 1819 @ 1823, to the problems solved, and the propositions under discussion in 1842, prepares the attendant on Mr. Gliddon's oral lectures with clear views of the processes through which long-buried Egypt has been resuscitated, and spares the lecturer from the tedious, if otherwise indispensable, task of inflicting upon his hearers *proofs* that EGYPTIAN HIEROGLYPHICS, despite the fables, illusions, and misrepresentations of Greco-Roman classical writers, and, until recently, the singular apathy or scepticism of the moderns, *are positively translated*.

The lecturer maintained, that any intelligent person of education, after the same study as one would inevitably have to devote to the acquirement of other dead or living Oriental tongues and graphical characters ; with the aid of Champollion's Grammar and Dictionary of Hieroglyphics ; Peyron's, Tattam's and Parthey's Coptic lexicons and grammars ; guided by the philological labors of Rosellini, Lepsius, Birch, Bunsen, De Saulcy, and their colleagues of the *new school* ; and in possession of an adequate supply of Egyptian documents and texts, (all things which are very accessible to the purchaser, if still scarce in the academical, as well as in the public libraries of England, and of the United States) can, at this day, read into *English*, direct from the *hieroglyphics*, WORDS, PHRASES, and CONSECUTIVE SENTENCES, with perfect certainty.

If the mutilated condition of some hoary legends, sculptured or painted on the ruins now disappearing with frightful rapidity† from the banks of the Nile, or religiously preserved in the museums of Europe ; if M.S. writings on crumbling fragments of Papyri, drawn from tombs anterior to Abrahamic, or coeval with Mosaic generations, present from their nature insuperable obstacles to translation and still baffle the acutest decipherer ; or if (from deficiencies of pending acquaintance with the primeval language, the HIERA-DIALEKTOS, or "sacred tongue," resuscitated by *Lepsius*, and

* The Chapters on Early Egyptian History, already alluded to.

† Thanks to *Mohammed Ali*. Consult GLIDDON's, "Appeal to the Antiquaries of Europe on the Destruction of the Monuments of Egypt." London : Madden and Co., 1841. PRISSE, "Collections Egyptiennes au Kaire," in the *Revue Archéologique*, March, 1846 : and AMPÈRE, "Recherches en Egypte et en Nubie," in the *Revue des deux Mondes*, from Aug., 1846, *passim*.—G.R.G.

now recognized by all hierological students) *blanks*, which otherwise are seldom more than verbal, still abound in the translations issuing from the press of Europe, and we do not yet know every fact, or the positive meaning of each word, contained in the hieroglyphics, so as to render into English every thing they do say ; at least since 1840, we can triumphantly demonstrate what these heretofore mystified records *do not say*. No longer does science seek in Egyptian annals for præternatural or superhuman revelations. The "Land of Darkness," is no longer *dark*, save in the loam deposited by her sacred river ; and the antique region that to Hebrews, Greeks, and Romans, was essentially the abode of mysticism and marvel—the country around which, more than any other, foreign tradition had entwined the legends of "physical impossibilities," in accounts and tales to this day consecrated by superstition and ignorance, has become to the disciple of Champollion, the most practical, rational, and human in her romantic history, of any portion of the terrestrial globe. The *evidences* for this assertion would, the Lecturer observed, resile from all these Egyptian discourses.

Thanks to the reading of the hieroglyphics, the relative ages of all the Monuments are known. We also know to what divinity they were consecrated, or of whose king's deeds they record the annals : because the sculptured writings of Egypt are at one and the same time *Tableaux* and *Manuscripts*. In the former acceptation, they are pictures explained by a legend, as in pictorial designs of the mediæval period of our occidental history ; in the latter, they are M.S.S. illuminated by paintings or drawings, as in the "Illustrated London News" of our present day. With this double key, this duplicate method of comparison and reciprocal explanation, there are few reasonable chances of error in expounding the objects storied on the grander series of Pharaonic remains.

"If we enter a tomb," said Mr. Gliddon, "we see the deceased surrounded by his family, who offer him their remembrances. The—I had almost said Christian—name, the profession, rank, and blood-relationship of each member of the family are written against him or her. The scenes of ordinary life are painted on the walls. Study, gymnastics, feasts, banquets, wars, sacrifices, death and funeral, are all faithfully delineated in these sepulchral illustrations of manners, which are often epic in their character. You have the song with which the Egyptian enlivened his labour in the field ; the anthem that when living he offered to his Creator, and the death-wail that accompanied his body to the grave. Every condition, every art, every trade figures in this picturesque encyclopædia, from the monarch, priest, and warrior, to the artizan and herdsman. Then these tombs are real museums of antiquities—utensils, toilet-tables, inkstands, pens, books, the incense bearer, and smelling bottle, are found in them. The wheat which the Egyptian ate, the fruit that adorned his dessert-table, peas, beans, and barley, which still germinate when replanted, are also discovered.—The eggs, the desicated remains of the very milk he had once used for his breakfast, even the trussed and roasted goose, of which the guests at his wake had partaken—all these evidences of his humanity, and a myriad more, exist, in kind, in the museums of Europe, to attest their former owner's declaration to us, modern occidentals, althwart the oceans of time and the Atlantic, *Homo sum ; humani nihil a me*

alienum puto. But not only," continued the lecturer, "do the scenes sculptured or painted on the temples or in the sepulchres furnish every detail concerning the Egyptians; they give us the portraits, history, geographical names, and characteristics of an infinitude of Asiatic and African nations existing in days long anterior to the Exode—many of whom have left no other record of their presence on earth, and others again whose names are preserved in the Hebrew scriptures."

We were most struck by the number and variety of the African races, (distinct from the Egyptian children of Ham, who were *white men*,) exhibited in these illustrations; Negroes, ever captives and slaves, Berbers, Abyssinians, Nubians, and all the mulatto grades, living in the same latitudes, called by the same names; in short, in every respect, the same anciently as at this day, were pointed out to the audience.

Turning to the Asiatic Continent, Mr. Gliddon indicated on his splendid tableaux, Canaanites, who "were in the land" in Abraham's days; together with the portraits of ancient Tyrians, Ammonites, Philistines, Assyrians, Scythians, and Indogermanic families of 3500 years ago—and told us that hieroglyphical geography furnished the names of those primeval cities, Nineveh, Babel, Shinar, and the more recent appellations of inhabitants of Chaldea, Ionia, Arabia, Samaria, Persia, Thrace, etc., etc. All these Asiatic nations, and a hundred more, are recognized among the conquests or foreign politics of the Pharaohs.

The lecturer remarked that he should return frequently to the subject of Ethnography, and sustain the *diversity of the human race* with hieroglyphical documents reaching as far back as 2000 B.C., and with plates, skulls, and other data gathered from the researches of his friend and colleague, Dr. S. G. Morton, of Philadelphia.

Mr. Gliddon then spoke of the monumental inscriptions of the Egyptians, and after eulogizing the founders of that science to which he had devoted himself, he read the following extract from an essay of the eloquent Ampère:—*

"It is not only the *hieroglyphics* of Egypt. This country offers subjects of conversation and meditation which no traveller can entirely neglect, whoever he may be, if he have eyes to see, a memory to remember, and a sprinkling of imagination wherewith to dream. Who can be indifferent to the tableaux of unaccountable Nature on the banks of the Nile? At the spectacle of this river-land, that no other land resembles? Who will not be moved in the presence of this people, which of old accomplished such mighty deeds, and now are reduced to misery so extreme? Who can visit Alexandria, Cairo, the Pyramids, Heliopolis, Thebes, without being moved

* I cannot sufficiently express how much I am indebted to the brilliant articles of this country, published in the *Revue des deux Mondes*. In elegance of diction, accuracy of description, and thorough acquaintance with Egypt, pharaonic, classical, or modern, they far surpass anything of the kind hitherto published, and attract my warmest sympathies. This tribute of respect from a much older *Egyptian*, if a younger Egyptologist, (to the Author personally unknown,) who with Mr. A. C. HARRIS has wandered, in other days, over the same ground, will assure M. AMPÈRE that in the United States, at least, the merits of his compositions are thoroughly appreciated. London, October 1848.—G. R. G.

by reminiscences, the most imposing and the most diverse? The Bible, Homer, Philosophy, the Sciences, Greece, Rome, Christianity, the Monks, Islamism, the Crusades, the French Revolution : almost every thing great in the world's history, seems to converge into the path-way of him who traverses this memorable country! Abraham, Sesostris, Moses, Helen, Agesilaus, Alexander, Pompey, Cæsar, Cleopatra, Aristarchus, Plotinus, Pacomus, Origen, Athanasius, Saladin, St. Louis! Napoleon!—what names!—what contrasts! * * Egypt, which awakens all the grand memories of the past, interests us yet in the present and in the future: in the present, by the agonies of her parturition: in the future, through the destinies which Europe is preparing for her, so soon as Europe shall have taken possession of her, which cannot very long be retarded; [now that the *Isthmus of Suez* has again become the highroad of nations, the link which unites the Oriental to the Occidental hemisphere.] A country made to occupy eternally the world, Egypt appears at the very origin of the traditions of Judea and of Greece. Moses issues from her; Plato, Pythagoras, Lycurgus, Solon, Herodotus, Strabo and Tacitus enter into her bosom to be initiated in her sciences, religion, and laws. She attracts the thoughts and the tomb of Alexander, the piety of St. Louis, and the fortunes of Buonaparte; and at this moment (1846) the object of the exaggerated attention of London and Paris is Ibrahim Pacha,"—*Step-son of Mohammed Ali!*

Mr. Gliddon, stated that previously to the year 1802, nothing had been done towards deciphering the meaning of the hieroglyphics found in the sepulchres, and upon the monuments of the old Egyptians.—The key to these mysteries was furnished by the celebrated Rosetta Stone, an invaluable memorial of antiquity now in the British museum, which had been discovered in August 1799, by a French Officer of Engineers, between Rosetta and the sea, and not far from the mouth of the Nile. It is a stone of black basalt, three feet in length, and where it is entire, two feet and five inches in width, varying in thickness from ten to twelve inches. It contains three inscriptions, and is triglyphic and bilingual; that is, there are three copies of the same document, one in the Greek character and language, and the other two in dialects of the Egyptian language. Of the two inscriptions, one is in Enchorial or Demotic characters, and the other in Hieroglyphics. These inscriptions are a Ptolemaic edict, chiselled at Memphis, in honor of Ptolemy Epiphanes, 196 years before the Christian Era.—(See *Letronne* and *Hincks* on the difference of date: *n.c.* 196 or 197.)

The concluding sentence of the edict, which furnished the key to all the discoveries of the Champollionists, is in the following words:—"That this decree should be engraved on a tablet of hard stone, in Hieroglyphical, Enchorial and Greek characters, and should be set up in the first, second, and third rate temples before the statue of the ever-living king."

These words led to the natural inference that the inscription was the same in the three characters, and that the discovery of the *proper names* in each would give a clue to the construction of the whole.

The Greek inscription contained the name of *PTOLEMY* repeated, in its various inflexions, eleven times. The first effort, then, was to discover the places in the Demotic inscription corresponding to these frequent repetitions

of the name of Ptolemy in the Greek.—Mr. Gliddon here remarked that this Demotic or popular mode of writing was not used much before the year 700 B.C.—One group of seven letters was found in this Demotic, repeated eleven times. These seven letters were discovered to compose the word *PTOLMIS*, giving therefore, seven letters of the Demotic or Enchorial alphabet, from which the whole of that alphabet has been lately deduced.

The decipherer next turned his attention to the Hieroglyphical inscription. Here a *cartouche* or oval, which always encloses the name of a royal personage in hieroglyphic inscriptions, was found repeated several times. Hence it was concluded that these cartouches contained the word *Ptolmis*, corresponding to the name thus spelt, and repeated in the Demotic Inscription. The separate letters or signs of this word were, however, for a long time inexplicable. "I will take my oath," said the decipherer, looking at the cartouche, "that you are *Ptolmis*, but the strange spelling bothers me!"

The idea here suggested itself to the mind of the decipherer, with the suddenness of a burst of inspiration, that the hieroglyphics in these ovals of names must represent *sounds* instead of things, and with this hint he slowly proceeded to unravel the mystery. The things engraved, he discovered, were the representatives of the sounds of those letters, which were the initials of their names in the Coptic language. Thus the middle figure in the oval is a recumbent lioness, the Coptic name of which animal is *Laboi*; hence he concluded that the lioness represented the letter *L*. The three figures preceding the lioness, he inferred must stand for either *Pto* or *Mis*, accordingly as the word was read, from the right to the left, and the three that followed of course for *Mis* or *Pto*.

Mr. Gliddon here showed how the decipherer proceeded to determine at which hand he must begin to read the hieroglyphics, which is done by observing the direction of the cartouches, and the position of any animal in the line, and reading from the side towards which the animal is looking. Hence were obtained the signs of eight hieroglyphical letters, *PTOLMEES*.

A diagram suspended behind the lecturer containing the cartouches of Ptolemy, and showing the transition of characters from the primitive pictorial hieroglyphics, through the pure, the plain, and the linear forms, to the *Hieratic* or sacerdotal, and thence to the Demotic or popular styles, enabled the audience to comprehend the order in which the art of writing had been developed among the Egyptians. In the royal ellipsis, called cartouche, which contained the name orthographed, *PTOLMEES*, the figure of a *mat*, was the letter *P*, that of a *segment of a circle* *T*, a *flower with the stem bent* *O*, a *recumbent lioness* *L*, the *half of a cubit measure* *M*, *two tufts of reeds* *EE*, and a *siphon* *S*. He also stated that the pure hieroglyphics were sculptured in relief, that is, in raised figures, and that the figures were colored so as to resemble, as nearly as possible the animals and things which they represented. Mr. Gliddon here exhibited to the audience some casts of hieroglyphics which had been presented to him by his friend M. Jomard. The various antiquities of Mr. Gliddon's collection also served to illustrate the different styles of writings, on stone, pottery, porcelain, wood, &c., at successive epochs of Nilotic history.

Numerous were the examples given of the application of this principle of

phonetic hieroglyphics to other royal names. Among them was that of the far-famed Cleopatra; whose portrait, with that of her son Cæsarion, was exhibited as copied from the temple of Dendera. We derive our ideas of her beauty from Shakspeare and not from history. She was celebrated for her powers of fascination and the splendour of her court.

Mr. Gliddon here pointed to forty-eight portraits of Kings and Queens, selected by himself out of the work of Rosellini, from a much larger series of the Pharaohs. The oldest of these was Amunoph the I., the second King of the eighteenth Dynasty, who reigned between the sixteenth and eighteenth century B.C. Among the portraits was that of Sheshonk, B.C. 972, or Shishak, the conqueror of Rehoboam. In Egyptian portraits, allowance should be made for the want of perspective, of which their artists seem to have had no knowledge. The eyes are not foreshortened, but the profile is evidently correct. Thus the Pharaohs present us with their portraits, back to 3500 years ago.

The lecturer proceeded to read from his pictorial charts of hieroglyphics, the names of several kings; and by an exposition of the various forms of the name of RAMSES III., on the *Tablet of Abydos*, he rendered the combinations of figurative, symbolical, and phonetic signs clearly comprehensible to his audience; the more realized when he pointed to a splendid painting, representing Ramses, III., who reigned B.C. 1500, in his war chariot drawn by two horses, on his triumphant return from his African campaign.

Having thus satisfied his hearers that *hieroglyphics are readable*, the lecturer glanced rapidly over the main philological, and palæographical results established, since the publication of his *Chapters* in 1843, by the laborious researches of Birch, Lepsius, Bunsen, De Sauley &c., and commenced by making, in the language of Le Clerc, the following inquiry: "Who loves not *Etymologies*? What studious man is there whose imagination has not been caught straying from conjecture to conjecture, from century to century, in search of the *débris* of a forgotten tongue, of those relics of words that are but the fragments of the history of *Nations*?" "The sciences of *Philology* and of *History*," writes Eichhoff, "ever march in concert, and the one lends its support to the other; because the *life* of Nations manifests itself in their *language*, the faithful representative of their vicissitudes. Where national chronology stops short, where the thread of tradition is broken, the antique genealogy of *words* that have survived the ruin of empires comes in to shed light upon the very cradle of humanity, and to consecrate the memory of generations long since engulfed in the quicksands of Time."

"In the midst," said Mr. Gliddon, "of the darkness which enwraps the earlier ages of the world, among so many errors and fables with which each nation has encircled its cradle, Philology becomes the conducting thread that leads us, if not with certainty, at least with method and probability. What, in fact," he asked, "does General History teach us of the first establishment of mankind, of the relations of men to each other, of their divisions, of the formation of tribes and of their dispersion? Who has followed their noiseless march across the deserts, the rivers and the mountains, until this network of nations progressively spread itself over the whole earth? One single book, in a few sublime passages, does afford us a glimpse of this imposing mystery,

but limiting itself to broad truths, it proclaims only the primitive unity of the Caucasian races, epitomized in Shem, Ham, and Japhet, without giving us the history of their vicissitudes. Comparative philology and ethnography," said Mr. Gliddon, "alone remain to us as guides in this pursuit fraught with so lofty an interest."

Great advances, Mr. Gliddon stated, had been made in Egyptian philology within a few years. As an evidence of the immense labor devoted to this subject, he stated that Moritz Schwartze had published a work on it, a copy of which he produced, the first half of the first volume of which contains 2,183 quarto pages!

The Coptic tongue, the Lecturer maintained, is not the language of the hieroglyphics, to which it bears about the same relation that our present English does to that current prior to the days of Chaucer. The language called Coptic is that of the Jacobites, from a Christian sect of that name, and is the dialect in which the Christian liturgies of Egypt are written.

Coptic alone will not translate the hieroglyphics. It is derived from the mongrel amalgamation of many foreign nations—Persians, Greeks, Libyans, Africans, Jews, Arabs, and Romans, which took place in the latter days of Nilotic degradation; but it preserves the roots of the anterior, or so called "*sacred tongue*," in which the primeval characters of the hieroglyphics were first written, above 5000 years ago.

Of this primeval or sacred tongue about 400 roots have been recovered; nor does its vocabulary seem to have comprised above 500 primitive radicals: but the most curious linguistical fact is, that, on the earliest monuments extant, viz: the tombs of the third dynasty, about B.C. 3500, the letters expressing Egyptian vocal articulations of the sacred tongue were only fifteen in number; corresponding to our A, U, B, I, H, S, K, CH, SKN, F, P, T, M, N, and R. Mr. Gliddon connected this early poverty of speech with the traditions of the Cadmean, Phœnician, and primitive Hebrew alphabets, all of which at first had but fifteen or sixteen letters.

The question here suggested itself, how far back monumental evidence will carry this undeveloped language. We have no documents of the earliest days of Egypt, and of the reign of Menes, her first Pharaoh. We find, however, about 250 years after Menes, the fifteen letters of the old Egyptian in familiar use, whence we may infer that writing was known in the age of that monarch, 3643, B.C. according to Bunsen; but still earlier in all probability.

The emblem of the Scribe's *palette, reed-pen and ink-bottle*, (see Chapters p. 16.) is found in the legends of the 4th Dynasty, about B.C. 3400, which proves that, in that remote day, the art of writing was already familiar to the builders of the Pyramids.

The sign of a papyrus or scroll, is also seen among the hieroglyphics of the 12th dynasty, showing that the Egyptians possessed *books* at a period long antecedent to the time of Abraham, or 2800 B.C. (BUNSEN) the era of the 12th dynasty.

The *Tableau* of characters indicated the nature of the transition apparently between the 12th and 18th Dyn., from the more ancient to the more current, or tachygraphical form, termed the *Hieratic* or sacerdotal.

Besides the Hieroglyphic and Hieratic, there was, as above stated, a third kind of writing known as the Demotic, Enchorial, or Epistolographic. This, as shown by De Saulcy, was alphabetic, and came into use about the time of Psammetticus, or say 700 B.C. From this time it was in popular use, until suppressed by a Roman Imperial Edict, and replaced by the Coptic alphabet of twenty-four Greek letters and seven Egyptian additions.*

LECTURE II.

Connections between Biblical and Pharaonic History.

The preceding discourse being intended to establish the fact, that *Egyptian hieroglyphics* ARE translated, as well as to afford copious references to published sources of information, Mr. Gliddon proceeded, this evening, to present some synchronisms between Biblical history and the later Pharaonic monuments of Egypt; pertinently observing, that if the validity of Hieroglyphical history were proved from the Scriptures for the times succeeding Moses, in all those cases where either record refers to the events mentioned in the other; the authenticity of *Hieroglyphical* monuments in affairs whereon the Bible is silent, and which antedate Moses by twenty centuries, cannot fairly be called in question.

With a few preliminary remarks, tending to impress upon his hearers the importance of hieroglyphical discoveries to the theologian and biblical student, the lecturer turned to Jeremiah xxxv. and 2d Kings xxv. etc., for the fall of Jerusalem beneath Chaldean invasion; showing by Jeremiah xlv., 30. that Pharaoh Hophra is the Egyptian King known to us in classical history under the name of *Apries*, B.C. 588; and giving a sketch from Greek authors of his deeds and times.

Apries was strangled by his rebellious subjects, but his body was allowed honourable burial in the Tomb of his ancestors, within the precincts of the Temple of Neith (a goddess whom the Greeks called Minerva) at Sais, in lower Egypt. "Sais is now," said the lecturer, "Sa-el-Hagar,"—Sais the Stony—lying in the Delta of Lower Egypt, about two miles from the river—a spot to me endeared by numberless familiar reminiscences—where I have wiled away not hours, but weeks—and many a time and oft, seated on the summit of the vast crude brick inclosure which still surrounds the crumbling vestiges of Sais, I have pondered over the departed visions of her glory, till fancy has conjured up in my mind's eye, the Temple of Neith, the Tombs of the Saitic Dynasty; and then, have I seen the Pharaonic city rise from the dust in all her pristine majesty. A lake overgrown with sedge, and teeming with wild fowl, indicates the site of the one whereon the priests of Neith performed their annual aquatic processions; mounds of crude and red brick, with

* The authorities from whose instructive pages the original portion of this lecture was compiled, when first delivered at Philadelphia in 1846, were LEPSIUS, "Lettre à M. Rosellini," 1837 :—*Ibid.* "Todtenbuch der Ägypter." Introduction;—and BUNSEN, "Ägyptens Stelle in der Weltgeschichte." With an expression of my profound admiration of its invaluable contents, the reader is now referred to Mr. COTTRELL's translation of "Egypt's Place in Universal History," London 848.—G.R.G.

fragments of pottery, marble columns, granite friezes, and other broken relics—proofs of departed greatness—mark the position of the once stupendous Temple ; a granite sarcophagus, protruding from the soil, establishes the location of the once vast Necropolis. Yet, beyond the strange desolation of the scene, there is so little remaining whereon to foster imagination, that Sais is rarely visited by the traveller, who follows the beaten route of a mere tourist. But that is the very reason why it possesses peculiar attractions, for it serves us old Egyptians, as a game preserve! Having been there every season for some years, I have netted ducks on Minerva's Lake ; shot jackals amid the ruins of the Sanctuary of Neith ; chased wolves in the commercial part of the city ; speared the wild hog where Apries was strangled ; and scared the owl and bittern from the sepulchre of Amasis."

After explaining that each Pharaoh had two *cartouches*, the first called his *prenomen*, generally symbolic, the second termed his *nomen*, whose elements are phonetic, though frequently both phonetic and symbolic ; Mr. Gliddon pointed out, in his Illustrations, the Ovals of a Pharaoh, whose hieroglyphical name, "Sun, who in his heart rejoiceth," reads phonetically HAPHRE. But the accuracy of the Scriptural record was made strikingly apparent when Mr. Gliddon explained how, after this monarch's rashness lost him his throne and life, his monumental cartouche was changed to *Remesto*, "the abominable Pharaoh!" strangely fulfilling the prophetic curse—"saith Jehovah, behold ! I will give Pharaoh *Hophra*, king of Egypt, into the hands of his enemies, and into the hand of them who seek his life."

Ascending in retrograde order from the later to the earlier times, Mr. Gliddon elucidated in what manner the cartouches of Pharaoh NEKO again confirmed the accuracy of 2d Kings, xxiii., and 2d Chronicles xxxv.; while the sculptured portraits of Neko's father and mother, and some curious data on the chronological lights derived about his reign from hieroglyphical tablets, amply demonstrated the practical utility of these lectures to the biblical student. The portrait of "Tarhaka-melek-Cush," referred to in 2d Kings, xix., and his hieroglyphical name TAhARAKA were produced ; and besides other evidences of his historical existence, it is wonderful that, after 2,500 years of peaceful slumber in her Egyptian tomb, the "Nurse of the Daughter of King Tarhaka," should now be a mummy at the museum of Florence.

The portrait of his predecessor, Pharaoh So, (2d Kings xvii. 4) give us the same family cast of feature so well defined by Dr. Morton, (*Crania Egyptiaca*, Philadelphia, 1844,) as the Austro-Egyptian ; and his historical place was identified in the cartouches of the Ethiopian King AMUNMAI SHEBA ToK.

The mention of the word Ethiopian, in connexion with the preceding King, and the "Zerah-of-Cush" of 2d Chronicles, xiv., led the lecturer to digress upon the very erroneous ideas current upon the primitive geographical application of the name *Ethiopia*, which, he maintained, in no text whatever of the Bible, refers to Africa or to African races, (any more than the word Ham of Gen. 10th, which is only KHAM, the *dark land of Egypt* ;) but always to the *Cushites*, or dark Arabs of Southern Arabia. The derivation of *Æthiopia* is the Greek Αἴθιο, to *burn*, and *ors*, *face*, which in the Homeric age, only meant "Sun-burned-faced-people"—i.e., all nations darker than

the Indogermanic Greeks; and had a generic and not a strictly geographical application. The Hebrew word is *Cush*; and in the Bible it refers exclusively to the dark Cushite Arabs, a Caucasian family. Infinite errors, by attention to this simple fact, would be removed, and Mr. Gliddon said he could produce the highest authority in support of his assertion.*

In no instance is this critical distinction more necessary than as respects the conflict between *Asa* and *Zerah*, who has been confounded by some with Pharaoh Osorkon, second King of the twenty-second dynasty; by others, his vast army been transported, with the case of Solomon's magic carpet, from Meroë to Palestine, (either *via* Egypt or the Red Sea!) in the face of historical and physical impossibilities. By showing that *Zerah* must have been a *Cushite* prince of Southern Arabia, Mr. Gliddon satisfactorily established, that the events mentioned in 2d Chron. xiv., 9, @ 13, have no connexion whatever with Egypt, or with hieroglyphical history.

Long and valuable were the explanations given of 1st Kings, xiv., 25, and 2d Chron., xii., 1, @ 10; whereby Shishak, the Conqueror of Rehoboam, was shown to be the Pharaoh SHESHONK of the hieroglyphics. His portrait was exhibited, together with the captive cities of Judah, Mahanaim, Beth-horon, Megiddo, &c. The lecturer, however, exposed the fallacy of those, who, mistaking a passage in Champollion's "Lettres," have fancied the shield which contains the letters EEUDH-MELK-Kah, to be surmounted by the *portrait* (!) of Rehoboam.† The face is merely typical of an *Asiatic*

* The first definite views I obtained on this important question were derived from personal attendance at *Letronne's*, "Cours d'Archéologie Egyptienne," Collège de France, *Séance*, 31 Janvier, 1846. The reader is referred to WALTON, "Biblia Polyglotta," 1657—*Proleg.* xv., pages 97—9; to LENORMANT, "Introduction à l'Histoire Ancienne," 1838—page 228; and to the admirable exposition of the *Settlements of Cush*, in FORSTER, "Historical Geography of Arabia," 1844; also to LETRONNE, "Statue Vocale de Memnon," 1833, pages 67, 71.—*Ibid.* Matériaux pour l'Histoire du Christianisme, 1832, pages 32, 33. Later investigations have convinced me, that similarity of name and sound has caused three CUSH-es to be confounded in history, *viz.*: CUSH of the Bible, the *Hamitic* Caucasian, whose geographical habitat was Southern Arabia; KUSH, or KeSH, of the hieroglyphics, applied by the Egyptians exclusively to aborigines of Africa, Negros, Barabera, &c.; and CUSH, of the Cushites, *Cusi*, *Skuthai*, &c., the Japethic or Indo-European families whose cradle originally lay in the trans-Euphratic provinces of Asia, as has been done to an incredible extent, all these distinct nomenclatures by the Greek term ÆTHIOPS, itself vague in application down to the times of Ptolemy the Geographer, and realize the almost inextricable confusion into which early historians have fallen!

The evidences of this, and of the historic error, which has been considered, will appear from the pen of my valued friend and colleague in ethnological inquiries, Dr. J. C. NORR, of Mobile, in the course of the present year; and will be followed by a paper of my own, defining the ETHNO-GEOGRAPHICAL Chart preserved in the 10th Chapter of Genesis, on which hieroglyphical, philological, and exegetical researches have combined to throw much light.—G.R.G.

† How easily the most extravagant errors are perpetuated, under the name of Scriptural confirmations, may be seen in the pages of a learned Divine, who, taking Champollion's inexact copy of this so-called "Portrait of Rehoboam," has actually traced a resemblance between this face and the equally-unknown features of the SAVIOUR; possibly as portrayed on Veronica's *Sudarium*! See WISEMAN, "Lectures on Science and Revealed Religion," in all editions since 1837.—G.R.G.

prisoner, and has the same features as the majority of the 131 (?) captive tribes offered by Sheshonk to the God *Amunra*. (Cf. *Chapters*, p. 9.)*

The synchronism of the Bible and the monuments was established at B.C. 971; prior to which date, Mr. Gliddon states, that there is no mention of the Hebrews in the *hieroglyphics* that will stand the test of criticism:—although *Egyptian* history continues to recede, perhaps 3000 years prior to the days of Rehoboam. The Bible does not mention by *name* the Pharaohs (i.e. *the Suns*, or kings,) who were cotemporary with Solomon, Moses, Joseph, or Abraham; and in consequence, it is impossible to identify which of the Egyptian Monarchs be alluded to among the multitude of Sovereigns whose names and deeds are extant on the monuments. All attempts at establishing synchronisms between Jewish and Nilotic annals, prior to B.C. 971, have hitherto failed—nor do the hieroglyphics afford the slightest data, for or against the authenticity of the Hebrew chronicles of patriarchal relations with Egypt.

Among the antiquarian relics in Mr. Gliddon's collection that serve to elucidate each topic, as well as to prove the practical utility of these researches, in furnishing tangible evidences that such persons once lived, is a pottery seal, that bears the name of Sheshonk the 2d., grandson of the conqueror Shishak; and a broken porcelain image which attests that queen Kero-mama, the wife of his fifth descendant, Takelloth 1st., B.C. 920 (see Gliddon's *Chapters* p. 65), had been duly embalmed—rest her soul!†

So copious, important, and novel are these questions, that it is impossible to follow the lecturer over the vast field of research he grasps without effort, in his learned discourses. The remainder of his lecture was occupied with a definition of the canonical prayer book of the Egyptians, of which Lepsius' copy from the Grand Ritual of *Tarîq* (a roll of papyrus, sixty-six feet long, by nearly two broad), with other specimens, was presented to his audience, containing above 150,000 hieroglyphical characters.

The existence of a similar, but, more simple, canonical "book of the Dead," at the earliest age of which we possess monuments, is proved by passages, or extracts, from portions of it, written on mummy cases, funeral

* My honored friend, the erudite Professor MICHELANGELO LANCI, whose stupendous labors in Hebrew and Arabian literature, (*"Paralipomeni all'illustrazione della Sagra Scrittura,"* 1845; and *"Trattato delle simboliche rappresentanze Arabiche,"* &c., 1846; obtainable at Rolandi's in Berner's Street,) seem likely to continue utterly unknown in this country, if sufficiently appreciated in the United States, has thrown doubts upon the current reading of the turretted oval *Judah-meleh-kah*, which he considers contrary to the grammatical laws of the Hebrew tongue. He proposes the substitution of *AUT-H-MELK-Krat*—"demeure du roi, ville"—through which, in the sense of the *city of the royal castle*, Jerusalem is mentioned under another form. Vide LANCI, "Lettre à M. Prisse d'Avennes, sur l'interprétation de l'Écriture Égyptienne," Paris, A. Larue, 8vo., 1847, pages 97-9. The two copies of this work were declined by the Librarians of the British Museum, and by Messrs. E. & F. N. D. Ind. Company.—G.R.G.

† Since the delivery of this Lecture, Mr. BIRCH has thrown vast light on the xxiid. Dynasty from an unexpected quarter, the *arrow-headed and hieroglyphical Sculptures* exhumed at *Nineveh*, by Mr. LAYARD. Space allows me merely to refer to the "Transactions of the Royal Society of Literature," Vol. 3rd, part I, 1848; pages 164-170.—G.R.G.

tablets etc., back to the coffin of King MEN-KH-RA of the 4th Dyn., previously to B.C. 3200.

The *Papyric* Rituals such as that of Lepsius, which is estimated to belong to the fifteenth century B.C., (Messrs. OSBURN and BIRCH deem it far more recent, however,) are of every age since the invention of Papyrus-Paper, (probably long prior to the 12th Dyn.,) down to four centuries after the Christian era; because every Egyptian who could afford it, had a copy buried with him in whole or in part. Mr. Gliddon ingeniously explained, by parallel examples, how, were it still the custom to inter copies of our Scriptures with our dead, and had such a practice been followed for the meagre 1000 years of our Anglo-Saxon history, an archæologist could ascertain our *Creed* by the collation of the various perfect and imperfect copies: which documents during this long period, would naturally present all the varieties of language, writing, and typography, faithfully exhibiting the vicissitudes of our literature. Some would be in old Saxon M.S.S., some in the style of Chaucer, others would present Shaksperian characteristics, and others again the colloquial idioms of our present day—whilst all would vary according to their respective ages, in typographical fashion, from the wooden blocks of the fifteenth century, down to the latest improvements in moveable type.

According to Lepsius' preface to the "Todtenbuch," or "Book of the Dead," the hieroglyphics of the first portion designated it as the "Sections of the glorification in the light of Osiris"—Champollion, however, terms it the "Book of the manifestations of light."

Briefly, Mr. Gliddon described the ritual, as a collection of poems, hymns, and liturgical prayers, offered by, as well as for the departed Egyptians, among whose cerements these papyri are found. No *translation* of the whole having yet appeared, the lecturer merely undertook to give the general tendency of its contents.*

Several more or less complete copies of it exist in hieroglyphical and in hieratic writings. It doubtless received various modifications in the course of so many centuries; each age adding or extending some idea, which, in the previous epoch, was less distinctly defined.

This "Ritual," was a formula of prayers and devotional exercises, of which the painted inscriptions on the mummy cases are, generally, extracts. In Egypt, extracts from it are met with upon every object connected with death or religion, precisely in the same manner as in Mohammedan Mosques we en-

* Having made no critical study of the Ritual myself, I have limited my expositions to such passages as are scattered through the works of the brothers Champollion, Lepsius, Bunsen, and particularly in OSBURN, "Antiquities of Egypt," published London, 1841, by the Religious Tract Society: but my grateful acknowledgements are especially due to MR. SAMUEL BIRCH, of the British Museum, who, in 1846, kindly furnished me with a synoptical sketch of the styles and order of Mummy-Cases, &c.; and to MR. CATTERMOLLE, of the Royal Society of Literature, who with the learned Author's sanction, permitted my perusal of MR. OSBURN'S M.S. paper on the "Book of the Dead," forthcoming in the Society's Transactions. My lectures in America have never failed to acknowledge, orally, the courtesies of these gentlemen. I have now the pleasure of recording them in print.—G.R.G.

counter passages from the *Kurân*, in Hebrew Synagogues extracts from the Old, and in Christian Churches from the New Testament.

It is divided into three parts; the first of which directs the prayers, ceremonies, and offerings to be used, while the body was carried from the embalmers to the tomb.

The second narrates the adventures of the Soul in Hades, after its separation from the body; and the third announces the return of the re-united Soul and body to the celestial regions.

The doctrine taught is, that the body, when embalmed, becomes a statue or type of Osiris, and as such an object of worship. The tomb thus becomes a temple for costly offerings, made by the relations of the deceased to the Deities, through the priestly guardians of the Tomb. The doctrine of the state after death, appears to have been as follows:—During the seventy days that elapsed between death and burial, it was supposed that the soul was extinct, but as soon as mummification was completed, it was resuscitated. It then ascended as a hawk, with a human head, to the new moon, and took a seat in the sun's boat, and after undergoing many tribulations, trials and sufferings, it arrived in the Hall of Osiris, where it was weighed in the balance of Truth and Justice, and received its due award. Among the incidents of this journey was its appearance before the forty-two assessors, each of whom presided over one sin.—To each the soul exclaims in self-righteousness, "Bring forward my excellence; search out my sins!" and states that it has never committed such and such sins, thus; *I have defrauded no man;—I have not prevaricated at the seat of Justice—I have not made slaves of the Egyptians—I have not committed adultery,—&c., &c.*

These forty-two declarations of innocence are equivalent to the commandments of the Mosaic dispensation, differing from the decalogue only in their number and their being so many declarations of *innocence*, instead of commandments not to sin; and in them the rudiments of the ten commandments can be easily found; but in the "Ritual for the Dead" of the Egyptians, ample evidences are perceptible of the loftiest conceptions; which prove, that inability to *express* their thoughts, as we do, in *Alphabetic* letters, rather than the absence of sublime ideas, in spiritual or metaphysical matters, is the chief accusation to be brought against the primeval compilers of this grand Liturgy; for in it are taught the primeval doctrine of the Soul's Immortality—the laws of embalment—the prayers offered for the deceased—the resurrection of the body—whilst most curious are the analogies to Hebrew literature, as regards the Soul-weighing in Job xxxi., 6, and Daniel v., 27. The confessions of the Soul to the forty-two assessors or grand Jury-men; their similarity in effect to some of the injunctions of our Decalogue; and the just punishment for gluttony, inflicted upon some hapless individual who is sent back to the earth in the form of a "striped pig"—these are things that our readers cannot understand without the Lecturer's *Tableaux*, and their exposition must be gathered from his oral discourses, which contained abundant comparisons between the dogmas of the Ritual and those of classical mythology.

As early as 1827, *Champollion-le-Jeune*, Mr. Gliddon remarked, had pointed out the symbolical figures represented in the Judgment-Hall;

showing that in *Amenthi* we have Hades—in *Osiris*, Pluto—in *Thmé*, Proserpine—in *Oms*, Cerberus—in *Thoth*, Mercury Psychopompus—in *Horus*, *Api*, and *Anubis*, Minos, Æacus, and Rhadamanthus—(names which resolve themselves likewise into Egyptian roots)—and in the whole scene we perceive the original *Psychostasia* of the Ancients.*

LECTURE III.

The Pyramids: Preliminary Discourse.

IN commencing a course of three Lectures on the Memphite *Pyramids*, Mr. Gliddon premised that he did not intend to notice, except very cursorily, the fallacies of Romans, Greeks, Hebrews or Arabs, or to enumerate all the fanciful and generally puerile tales of tourists for the last half century. Travellers could scarcely obtain access to any authentic information, in *Egypt*, respecting the Pyramids, until the formation, in 1836, of the Library of the Egyptian Society at Cairo. We may learn from the rapid and heedless manner in which tourists “do up” those very subjects which for years have baffled the most laborious investigators, that their opinions in Egyptian matters are seldom of consequence.

It might be mortifying to our vanity, to find that our time-honored theories have foundations of sand. We often oppose the progress of Truth, when we have to unlearn that which we have been taught. It was the influence of these feelings that persecuted Galileo, and to their action Champollion’s discoveries owe what of puny opposition has been encountered.† Truth, in the end, prevails, though few of her votaries live to enjoy or to witness her triumphs.

This fatality, the lecturer remarked, is singularly exemplified in the early death of the founders of Hierology—for Young, Champollion-*le-Jeune*, Rosellini, Salvolini, and Ungarelli, have none of them lived to behold the completion of the gigantic works they severally undertook. Dr. Richard Lepsius is justly termed by the great Letronne, “the Hope of Egyptian studies.” It would be unfair, however, not to state that, at the present hour, there are at least a dozen of his colleagues, who in Hierology could advance these glorious inquiries, even were the enthusiastic Prussian cut down in the flower of his manhood, or doomed to be arrested in his wonderful career.

* CHAMPOLLION, “Lettres de Rome,” and “Catalogue du Vatican.”—ROSELLINI, M.C. III, 502, &c.—But let me refer the reader to the magnificent articles of ALFRED MAURY, entitled “Psychostasie des Anciens,” and “Divinités Psychopompes,” *Revue Archéologique*, 1845-6-7.—G.R.G.

† “Un certain public, ce public qui tour à tour admet sans preuve ce qui est absurde et rejette sans motif ce qui est certain, satisfait dans les deux cas, parce qu’il se donne le plaisir de trancher les questions et s’affranchit de les examiner; ce public qui croit aux Osages quand ils viennent de Pérou, mais qui ne croit pas aux Chinois, quand ils viennent de Pérou; qui se convainc de l’existence de Pharamond, et n’est pas bien sûr que le latin et l’allemand puissent être de la même famille que le Sanscrit; ce public gobe-mouche quand il faut douter, esprit fort quand il faut croire, hochait et hoche encore la tête au nom de CHAMPOLLION, trouvant plus commode et plus court de nier sa découverte que d’ouvrir sa grammaire.” AMPÈRE, “Recherches en Egypte et en Nubie,” first article, Aug. 1846.—G. R. G.

The East, with her stupendous recollections that touch the cradle of the world, as this itself touches the cradle of the sun, with her vast seas of sand wherein are interred Empires and Nations, endures still; and in her bosom, she still preserves the first enigma, and the first traditions of the human race. In history as in poetry, in religious manifestations as in philosophical speculation, the East is antecedent to the West.

In proportion as knowledge of the East develops itself, we behold a new universe becoming revealed, and unfolding an astounding civilization anterior to antiquity, which Greek and Roman antiquity had never suspected. It were well that the future traveller, who visits the East with literary intentions, would, so far especially as Egypt is concerned, bear in mind the words of an Egyptian priest, uttered 2400 years ago: "O, Solon, Solon! You Greeks are always children, nor is there any such thing as an aged Grecian among you." . . . "Because all your souls are juvenile; neither containing any ancient opinion derived from remote tradition, nor any discipline hoary from its existence in former periods of time."

Mr. Gliddon observed that he was about to bring forward, not what tourists have fancied concerning the Pyramids, but what the master Hierologists know; and if any one deems his assertions controvertible, he would submit the following course of study as the only method of verifying his statements:—

1. To read the published volumes of Wilkinson, Champollion-*le-Jeune*, and his brother Champollion-Figeac, with the other authorities of the new school.

2. To read Col. Howard Vyse's work, entitled, "Operations carried on at the Pyramids of Gheezeh from 1837 to 1839," with the notes of Birch and the suggestions of Perring.

3. To read the researches of Dr. Lepsius at the Pyramids from November of 1842 to July, 1843, as far as published.

4. And lastly to visit the monuments themselves.

At the present day, Mr. Gliddon said, it required only the power of reading *English* for any one to make himself acquainted with all that had been written by the ancients and moderns upon the subject of the Pyramids, from Herodotus "the father of history," in 430 B.C., down to the latest "father of nonsense," who without acquaintance with the labours of the Champollionists, may have penned "*fadaises et platitudes*," on pyramidal questions; because Col. Vyse, in the appendix to the second volume of the quarto edition of his great work, has condensed into extracts all that is important in these ancient or modern accounts.

For himself, he thought he might be allowed to know something of the Pyramids, as for ten years of the best part of his life he had opened his windows in sight of these monuments, which were at the distance of only twelve miles from him. He began to visit the Pyramids in 1823, and ascended the largest when he was thirteen years of age. From 1831 to 1841 he made periodical excursions to their vicinity,—had slept for successive nights in the tombs around them, and often for weeks in tents pitched in their shade. His association with different parties had impressed upon his recol-

lection some nineteen ascents that he had made, and how many more he knew not. It might be inferred, from the fact of his having escorted seventeen delicate European and American ladies to the top of the largest, that he considered the climbing of them as no extraordinary feat to a man of common muscular activity. The details of individual sensations, he remarked, may be different, and have afforded, on this particular subject, abundant scope for pathos, or *Bathos*; but facts are plain stubborn things, and it is only with these that the Champollionists deal. He stated that the assistance of the Arabs, who live in villages in the vicinity of the Pyramids, could always be obtained, and that with their aid the ascent is made with no great difficulty and at a trifling expense. He here pointed to a fac-simile of the Great Pyramid, to show that its ascent could not be very arduous. This splendid painting is about eight feet high, exquisitely colored, and faithfully represents every stone of the N.E. angle of the monument.

The lecturer then spoke of many erroneous statements that had been made in regard to the Pyramids. By some it has been conjectured that they are antediluvian in age, forgetting that four of these monuments are of sun-dried brick that would have been washed away in three American winters, and much less could have withstood the tempests of the Flood. Besides, these bricks are full of Nile shells, which show that the "Sacred River" rolled beneath their site prior to their erection.

Their construction has been attributed to the first children of Noah, who built these structures with a view of elevating themselves above the waters of a second Deluge. By others it has been attributed to Jins or Genii. By others still, it has been conjectured that they are of Cyclopian or Titanic origin—erected by Giants. Early Eastern writers speculated seriously whether the Pyramids were not built by Seth for his tomb before the Deluge. They have also been attributed to Nimrod, to the *Pali* of Hindostan, and even to the ancient Irish.

Assuming that these vast structures are the evidences of tyranny, arrogance, and impious oppression, a favourite theory has been to make the hapless Israelites the builders; and Calmet has, by an anagram, undertaken to prove that Moses and Aaron were only foremen of the work. By some the Pyramids have been made the granaries of Joseph, and by others they have been fixed upon as Joseph's tomb; while not a few have seen in them the sepulchre of that Pharaoh who was drowned in the Red Sea! . . . Here the lecturer digressed to show, that there is no foundation whatever, in the Text of the *Pentateuch*, for the current opinion that *Pharaoh was drowned*. Thalmudic tradition, for what it is worth, on the contrary, expressly declares, that, "Pharaoh returned to Egypt, and reported the destruction of his *Army*." (Compare Exod. xiv. and xv.; Ps. cxxxvi. 15: cvi. 11.) On all these Israelitish questions the *hieroglyphics* are totally silent.

Now, to clear away the Jewish theory, it is only necessary to say, that the erection of the Pyramids at Memphis, antedates Abraham, the father of all the Hebrews, by many generations; while neither Joseph nor Pharaoh could well have been buried in above sixty places *at once!* even if, according to the Text, Jephthah was "buried in the *cities* of Gilead." (Judges xii. 7.)

The lecturer here referred to his diagrams, and proceeded to show at some length how ridiculous it is to suppose the Jews built the Pyramids.* †

A French writer has put forth a work in which he has thrown away a vast amount of learning and science by undertaking to prove, that the Pyramids were built to prevent the encroachments of the sand upon the valley of the Nile. (Mr. Gliddon here showed, by his maps and drawings, the absurdity of this theory.)§

Now for the objects of the Pyramids.—Generally speaking, these have been deemed atrociously impious, by European writers of the middle ages,

* “In my humble opinion,” says YEATES, “the Great Pyramid soon followed the Tower of Babel, and both had the same common design.” Dissertation on the antiquity, origin, and design of the principal Pyramids of Egypt: London, 1833, page 9 and 10. The same authority actually compares the measurements of the Great Pyramid with those of *Noah's Ark*. See his Plate of the Ark! and compare it with those of Villalpandus, Capellus, Kircher, etc., after reading LIGHTFOOT, “Harmony of the Old Testament,” 1647, pages 8, 9.

Even since the publication of Vyse's Pyramidal Discoveries it has been asserted, in *England*, by one who has travelled to the localities themselves, that the Pyramids were built with the spoils of Solomon's Temple! and “that the offerings of the Queen of Sheba”—after being treasured up in the Temple—carried off by Shishak, and hoarded up by Rhamsinitus—are now beheld in the indescribable masses of the Pyramids!—Vide WATHEEN, “Arts, Antiquities, and Chronology of Ancient Egypt, from Observations,” &c. London, 1842—pages 69, 70.—G. R. G.

† “Deinde,” says DICUIL, on the authority of the monk *Fidelis*, who passed through Egypt on a pilgrimage to the Holy Land, A.D. 762—5, “in Nilo longe navigando, septem Horrea, secundum numerum annorum abundantie, quæ Sanctus Joseph fecerat, de longinquo admirantes, tanquam montes viderunt, quatuor in uno loco, ac tria in altero.”—Gregory of Tours, A.D. 590, designates them as *Joseph Horrea*. This odd notion, that the Pyramids were the granaries of Joseph, arranged, like other matters, according to the harmonic No. 7, was very current in the ninth century; and in it we may trace the original application of the word πυρρος, PYROS, *Wheat*, with which later writers, slave-bound to Grecian etymologies, sought to explain an Egyptian name in the word PYRAMIS.—See LETRONNE's “Dicuil,” quoted hereinafter, page 24, et seq.—G. R. G.

§ Of all aberrations concerning the Pyramids, the most extraordinary is the one published (at Paris, 1845) by M. FIALIN DE PERSIGNY.—“De la destination et de l'utilité permanente des Pyramides de l'Egypte et de la Nubie contre les Invasions SABLONNEUSES du Desert.” My American lectures have frequently pointed out the cause of the hallucinations of this learned mathematician; who, never having been in Egypt, founded his theory on a defect of perspective in PERRING's “View of the Pyramids from the Tower of Tourah,” (Vyse, 3rd vol., Pl. 1, folio ed.) wherein the plain to the west of these mausolea is made to impend precipitately, as if mountains of sand, arrested by the “peculiar properties” of Angles, &c. (&c.), were about to overwhelm the monuments. I should not have deemed this preposterous hypothesis worthy of notice, had I not heard a Savan of RAOUL-ROCHETTE's unquestionable calibre, in his “Cours d'Archéologie Egyptienne” (Bibliothèque Royale, Séance 10 Fev. 1846), accept it with slight reservation, and designate the conjecture as “heureuse.”

My friend and old Cairo colleague, M. PRISSE D'AYENNES, (whose zealous accuracy in Egyptian matters is attested by the exquisite Plates of the “Oriental Album,” and whose hierological fidelity and skill are evinced in his “Continuation of Champollion's Monuments,” and in his Articles in the *Revue Archéologique*), will remember the smile of surprise with which we listened to this and other queer assertions.—G. R. G.

as by the Muslims to this day: aside from the fantasies of Moore's "Epicurean."

Even in 1832, a visitor of celebrity deemed the Pyramids to be mere copies of Indian mythological structures at Benares, and quotes the valid opinion of sapient Hindoo Brahmans to support his own private conviction, that the Sarcophagus in the Great Pyramid was not intended for a mummy, but for "holy water!" An English resident in Egypt, since 1835, wrote a book to demonstrate *mathematically* that the Pyramids were constructed solely with a view to "square the circle!" A recent Swedish *savant* deems them vast reservoirs wherein the waters of the Nile were purified. The most scientific theory has been that they were built for "astronomical observatories." While it is still maintained that the Great Pyramid, (the materials of which alone would suffice to build the city of Philadelphia,) was raised as the burial place of the "Bull Apis," or possibly to enshrine the last terrestrial relics of a *cow*.

Mr. Gliddon, in his allusion to the errors current in relation to the Pyramids, read an extract from the Introduction to Carey's Poems by Sir Walter Scott, ("Had the Pyramids of Egypt, equally disagreeable (!) in form, as senseless as to utility," &c.) which showed how impossible it was, only a few years ago, for the most gigantic intellects of Europe to shake off the trammels of early prejudice and time-honored delusion. He quoted also a passage from the writings of Sir Thomas Brown, ("For these dark caves and mummy repositories are *Satan's* (!) abodes. . . . Those huge structures and pyramidal immensities of the builders whercof so little is known. . . . Oblivion reclineth semisomnous on a Pyramid," &c.) We still perpetuate, for instance, the traditionary tales of the difficulty of ascending the Great Pyramid before the smooth *casing*-stones were removed, forgetting that since the 12th century, A.D., owing to the demolition of its revetment by the Arab Caliphate of Cairo, the surface of this mighty tomb presents a series of regular *steps*, rarely three and a-half feet high, and always above two feet broad.

The epochs, the builders and the objects of the pyramids, said Mr. Gliddon, had for 2000 years been dreams, fallacies, and mysteries, and to the inquirer after truth in the pages of ancient or modern literature, there was no fact connected with them proved to be true, before the year 1820, beyond the mere fact of their existence. (See *Chapters*, 1843, page 54.)*

* The friend and earliest prompter of CHAMPOLLION in hieroglyphical discovery, whose illustrious name is identified with the triumphs of that science which, in common with all departments of archaeology, has been so effectively illumined by his own mighty labors, will excuse the subjoined quotation from a rare little work, abounding in curious and most useful *facts*, disinterred and applied to many points of history with that felicitous acumen for which the author is world-renowned. It serves me, more forcibly than any other, to exemplify the *difference* between scientific opinions in A.D. 1814, and those expressed in the instructive lessons I listened to during the winter of 1846, no less than in all his varied works and papers, up to 1848. The work itself fell in my way last March, at New Orleans, for the first time. "Malgré les recherches les plus opiniâtres des savans modernes; malgré les hypothèses les plus hardies, et, si l'on veut, les plus ingénieuses, nous ignorons encore la véritable destination des pyramides. Qui pourra jamais décider si se sont des monumens sepulchraux, scientifiques ou religieux, des tombeaux des

The Champollionists are entitled to the merit of having expunged from the mental history of man the many aberrations on this subject left on record. Having expressed the wish that in examining this question, we should make use of the plain common sense which distinguishes this age, as it did that of the building of the Pyramids, Mr. Gliddon defined the three heads of his discourse :

1. As to the epoch of the pyramids of Memphis. These were all built between the times of Noah and Abraham in the scale of biblical chronology, and those of Menes, the first Pharaoh of Egypt, and the founder of the *first* dynasty at Memphis, and the *thirteenth* dynasty in collateral Egyptian hieroglyphical chronology.* Thus all the Memphite pyramids existed and were ancient 2000 years before Christ. All the pyramids in Lower Egypt are 4000 years old, and taking the pyramid of Mæris, according to Lepsius' letters, built between 2151 and 2194 years before Christ, as the last of this series, the remainder will successively recede to above 5000 years ago.

2. The builders of the pyramids were Mizraimites, children of Ham of the Caucasian race. Whether these people were *autochthones* or *terreæ geniti*, or whether they came originally from Asia, is a question Mr. Gliddon discusses in other lectures, referring in the meantime to Morton's *ÆGYPTIACA*. (A succeeding lecture will contain a note on the subject.) It is sufficient to say, that they were Caucasians, and white men, and Egyptians.

3. In their objects the pyramids were exclusively sepulchral. They represent the tombs of Pharaohs who ruled in Memphis prior to the invasion of the Hykshos tribes, and are, therefore, the sepulchres of a long line of Egyptian Kings who reigned from the first to the thirteenth dynasty of Manetho.

Mr. Gliddon stated that he paid very little attention to the opinions of any Egyptian writers previously to the Great French Work on Egypt, printed at Paris, and the "*Egyptiaca*" of Hamilton, published at London, both results of the French and English expeditions to Egypt in 1798 to 1802. We are to take our departure from the beginning of this century ; but even to these works so much has been added, since 1835, by the labors of the Champollion-

rois, des observatoires astronomiques, des témoins muets de l'ancien culte du soleil, ou des monumens destinés à transmettre le souvenir des revolutions du globe en conservant les archives des peuples ? Tout semble nous avertir que nous devons, à cet égard, nous resigner à une éternelle ignorance. Comment donc se faire une idée juste de l'importance que les Egyptiens avaient attachée aux pyramides dont la destination est inconnue ?"—page 105-6 . . . " Leur destination qu'on ignorera toujours."—page 116.—LETRONNE, " Recherches, &c., sur le Livre de mensura orbis terræ, composé en Irlande, 9me. siècle, par DICUIL." Paris. 1814.—Compare " LETRONNE," *Introduction* to " *Recueil des Inscriptions*," 1842.—*Ibid.* " *Représentations Zodiaques en Egypte*," 1846.—G. R. G.

* I have been aware, since the arrival at Philadelphia of Chev. BUNSEN's great work, in July, 1845, as well as through correspondence with Professor LEPSIUS, that no pyramidal monuments, hitherto identified, antedate the third dynasty. The above view, therefore, like all others in these pages affecting specific dates, is merely approximative. *Manetho* says, that VENEPHES built Pyramids in the second dynasty : and until LEPSIUS publishes the documents discovered by the Prussian Mission to Egypt, I content myself by indicating *Menes* and the thirteenth dynasty, as the extreme boundaries of the regal sepulchres of the *Old Empire*.—G. R. G.

ists, that they must now be taken with many grains of allowance. Travels in Egypt before the French expedition, and descriptions of the pyramids before 1825, save in the French Work, are rarely of any value to the archæologist.

Before entering upon details, Mr. Gliddon referred to his numerous illustrations, that were hanging around the room. Among these were a panoramic view of the Memphite Necropolis, comprising the Pyramids from Aboorooash to Dashoor, a distance of twenty-two miles, the original of which was taken for him in 1843 by M. Linant, Chief Engineer in Mohammed Ali's service; and a beautiful painting of the great Pyramid, which has been enlarged from a lithographic proof copy of a drawing taken on the spot by Mr. E. W. Lane, the accurate author of the "Modern Egyptians."

Only the interior construction of the Great Pyramid is seen at the present day, because the beautiful outer casing was removed by the Caliphs. It must be understood that every Pyramid is four-sided.

Mr. Gliddon then described the Great Pyramid. This is built over a hillock which Bruce hastily conjectured to extend to the top of the Pyramid. Wilkinson estimates the hillock at seventy-two feet, a little more than one-sixth of the height of the Pyramid, which was originally 480 feet perpendicular.—The casing was entire in the days of Herodotus and Diodorus; and it continued so until some time subsequent to the Christian era.* Arab historians tell us that some centuries ago, the Saracenic Caliphs of Cairo took down the outer casing-stones, partly to destroy the Pyramid, and partly for the sake of the materials. The average loss of surface by this means is some twenty-three feet, and of height about thirty, in 5,000 years.

The Great Pyramid, like all the others, faces the four points of the compass, with an exactitude that indicates possible acquaintance with the laws of the magnet. The entrance to Pyramids is at the north side at various heights. In the Great Pyramid the angle of the outside is 51d. 50m., the inclined height 611 feet, and the present perpendicular height 450 feet 9 inches. Some idea of its altitude may be formed by comparing it with that of other monuments. It is forty-three feet higher than St. Peter's at Rome, —about 126 feet higher than St. Paul's in London, and more than twice the

* For the proofs, see LETRONNE's "Dicuil," pages 90 and 115. AMMIAN. MARCELL. "In summities acutissimas desinentes."—PHILO OF BYZANTIUM, "*καὶ γῶμονος σχῆμα*."—PLINY says that the surface of the Pyramids was *smooth*.—In the years 762—5, A.D., the Monk FIDELIS states, "*Illa (horrea) in fine sublimitatis, quasi gracile acumen habent*." ABD-EL-LATEEF, in the 12th century, describes the difficulty of ascent, except by "persons accustomed to mount" by the small holes cut in the casing of the great Pyramid; precisely similar to those extant in that portion of the revetment which still surmounts the second one.

WILKINSON (*Topography of Thebes*, 1835; and *Modern Egypt and Thebes*, 1844) gives the Arab writers who describe the successive devastations of the Caliphs—HAROON-EL RASHID, A.D. 809—EL-MAMOON, 840—TOOLOON, 868—EL-MOTASSEM, 892—and KARAKOOSH, who was SALEH-ED-DEEN's minister in 1180. Here the chain of pyramidal annals is broken by the Crusades; to be resumed by LETRONNE with the visits of modern travellers, from 1605 to 1799. History shows that, in 18 centuries, the great Pyramid had lost in height about 25 feet English; of which Arab desecrations, from the 12th to the 18th century, A.D. account for some 23 feet. The utility of this sketch of pyramidal diminution will become apparent in the succeeding Lecture, No. IV.—G. R. G.

height of the Bunker Hill monument, Boston. If converted into *brick*, the materials of the Great Pyramid would build the entire city of *Philadelphia*!

Mr. Gliddon stated, as the only instance of death by a fall from the Pyramid, the case of James Mayes, an English traveller, who committed suicide by throwing himself on the 16th of April, 1831, from the top of the largest. His body rolled from step to step with accelerated motion, reaching the bottom a shapeless mass of bleeding matter. With common caution and the assistance of Arab guides, there is no danger in the ascent or descent.

The view from the summit of the Great Pyramid is magnificent in the extreme, and of its kind, unique—varying, however, with the state of the atmosphere, the hour of the day, and the different seasons of the year. Dr. Lepsius, 'tis said, has caused a Panoramic view to be taken from the summit of the second Pyramid. Mr. Gliddon hoped that besides the day view, the Prussians would add their night scene of New Year's Eve, 1842, when the blaze of bonfires, lighted on the top of each of the three Pyramids, cast a lurid glare on every side, bringing out the craggy peaks of the long-deseccrated Mausolea of Memphite Pharaohs, tinting that drear wilderness of tombs with a light, emblematical of Lepsius' vindication of their inmates' memories, and leaving the shadows of funereal gloom to symbolize the fifty centuries of historic night, now broken by the hierologists:—

“Dark has been thy night,
Oh, Egypt! but the flame

Of new-born *science* gilds thine ancient name.”

Prefacing his description with *Aamer's* beautiful specification of Egypt's natural features in that writer's account to the Caliph *Omar*, and indicating, with his index-wand, the Country on his coloured map, (8 feet by 4), the lecturer presented to his auditors, a comprehensive prospect from the Great Pyramid.

Standing on the summit, now a platform of about thirty-feet square, you are raised above the low Nile about 612 feet, or some 590 feet above the level of the cultivated soil of Egypt at that spot. To the West, the eye stretches over the Libyan Desert, which is here an undulating table-land of limestone rock, on the surface of which variegated pebbles and gravel of light brown hue give, as far as the horizon, a dreary waste, unbroken by the slightest vegetation; and, in desolation and aridity, the Libyan Desert extends from the foot of the Pyramids, through the Sahara, to the “Sea of Darkness”—the distant Atlantic Ocean.

To the North, breaking away from the hilly angle which is crowned by the Pyramid of Abooroash, lies the Delta of Lower Egypt—diversified on the left hand with the edge of the desert, and on the right by the Nile, with verdant fields, waving palm trees, lofty sycamores, and distant towns—while dimly on the north-eastern horizon rises the Obelisk of Heliopolis, raised by *Sesortasen*, above 4000 years ago. Boats, cattle, population, with all the attributes of agricultural riches, lend a soft charm to the one side, strangely contrasted with the sharp line of desert on the other.

To the East, on the plain beneath you, beyond the strip of sand which intervenes between the hill of the Pyramids and the alluvial soil—a breadth of about a thousand yards—your eye sweeps over a cultivated plain, intersected by canals and broken by grey hamlets, to the sacred Nile; while across the

river, flanked with a red grit-stone hill to the left, and to the right, shadowed by the lengthened limestone range, whence were taken the casing-blocks of the Pyramids, under the brown mountain of the Mokattam, rises "Mussr el-Qāhirah,"—Cairo the victorious—the far-famed "Um ed-Dinnyeh,"—the "mother of the world,"—and "El Mahrooseh," or the "Guarded City," as she is proudly termed by the natives, with her citadel, minarets, palaces, and gardens, looming at the distance of twelve miles from the Pyramids, presents one of the most picturesque and romantic prospects in the world.

To the South, close at hand, stand the next two large and other small Pyramids of Gheezeh. Beyond them successively arise, along the edge of the desert-rock, the Pyramids of Abooseer, Saccàra and Dashoor—being the tombs of above thirty monarchs, whose uncertain names were for 2000 years unknown—all in a line of twenty miles: while a little to the left, and shrouded from your sight by a vast forest of palm trees, now growing on the alluvial deposit, which for 2000 years has been annually rising over her palaces and temples, covering the halls of her judiciary, the colleges of her priesthood, the abodes of her commerce, and the dwellings of her people, with ten feet of slime, lie the mounds that were of yore the walls of Memphis, some of whose once mighty sovereigns, powerful nobility, and cultivated population, two thousand years ago, still slept in that vast cemetery, of which the Pyramid whereon you are standing formed the wonder amidst wonders, perhaps 3000 years *before*!

At your feet on every side, are the countless sepulchres of above one hundred generations of departed life—and, here, in every stage of desecration and decay, do you behold the skulls, and bones, and winding shrouds of some of the noblest of the human race, whose remote hour of life transcends Abraham's antiquity.

LECTURE IV.

The Pyramids, continued.

THE Great Pyramid, the lecturer resumed, is built over a small hill, forming its nucleus, the stone of which its bulk is composed being limestone quarried from the Libyan hills. It was cased with beautiful limestone, brought from a distance of fifteen miles across the River, and the quarries of Toorah. All Pyramids were originally smooth on the outside. Col. Vyse, who expended \$50,000 in his researches in Egypt, discovered, by digging down, some of the blocks of the outer covering of the Great Pyramid. Each one of these casing stones, Mr. Gliddon said, he had some recollection of having heard an architect who measured them, estimate at eight tons.

The vertical height of the Great Pyramid (now 450 ft. 9 in.) was originally 280 Egyptian cubits, or 480 feet, and each of the faces was about 746 feet at the base, making the proportion of the base to the height as 8 to 5. Mr. Gliddon here exhibited a copy of an ancient measuring-stick (date, as early as Pharaoh *Hor*, of the eighteenth Dynasty, or about the sixteenth century B.C.)* found by M. PRISSE, 1839, between some of the mason-work when a propylon of Karnac was blown up by order of the Pasha. This measure agreed with the cubit by which Solomon built the Temple, and Noah

* This ancient mason's rule was subsequently ceded to me at Cairo by M. PRISSE for the choice antiquarian cabinet of Mr. A. C. HARRIS of Alexandria, by

the Ark; and was the same as that mentioned in Ezekiel xl., 5, and xliii., 13. By this stick every monument in Egypt can be measured.

Mr. Gliddon now proceeded to describe the interior of the great Pyramid, and by means of his splendid illustrations made his auditors familiar with the various passages, the great Hall, the King's and Queen's Chambers, the so-called Well, &c. The principle of the pointed arch, at the entrance, along the galleries, and in the roofs of some chambers, is admirably adapted to support enormous weights. The Sarcophagus which stands in the King's Chamber formerly contained the body of one of the two builders of this Pyramid.*

In the sides of this Chamber are the openings of two air passages.—Similar openings were found by Col. Vyse on the outside of the Pyramid; and an Arab discovered that the northern air channel was open from top to bottom, by placing a cat at the outer orifice and her kittens at the other, shutting them in with stones. The mother soon found her way down, through the Pyramid, to her little family; thus proving that this hitherto mysterious passage communicated with the outside. This anecdote, the lecturer remarked, was current at Cairo in 1838; but it is not mentioned in Col. Vyse's great work, for therein are recorded only the *scientific* methods of solving architectural enigmas. Previously to the clearing of these passages the air in the Pyramid was quite suffocating.

Here the lecturer explained, by Vyse's Plates, the hieroglyphical names found in 1837 on the *quarrier's marks* existing in the entresols above the King's chamber, which gave the cartouches of *Shoopho-Cheops*; and by reference to "Egypt's Place in the World's History," he showed how it came to pass, some 5,000 years ago, that *two* kings had built this enormous structure.

The former area occupied by the Great Pyramid was 13 acres, 1 rood and 22 poles. The present area of the base is 12 acres, 3 roods and 3 poles. The perpendicular height is now 450 feet 9 inches, and the inclined height 611 feet, at an angle of 51° 50'. The original amount of masonry was about 89,028,000 cubic ft., equivalent to 6,848,000 tons. It was, said Mr. Gliddon, the opinion of a practical builder, that if the limestone in the Great Pyramid were converted into bricks, there would be sufficient to construct all the dwelling houses in Philadelphia; while the granite which lines it, would be enough to face all the churches and public edifices. About the one thousand five hundred and ninetieth part of the Great Pyramid is occupied by the chambers and Passages, while all the rest is solid masonry.

whom it has lately been presented to the British Museum. A lecture, delivered by me before the "Lowell Institute" of Boston, in December 1843, was devoted to a comparison between its divisions and those of other Oriental cubits, ancient and modern. Mr. FERRING, (*Appendix* to Vyse's "Operations," 3rd. vol., 1842,) estimates the length of the Cubit on this measure at ft. 1.719; and in a letter, Paris, Jan. 1844, published in the *Athenæum*, No. 854, he has applied it to other Pyramids. See also the valuable synoptical table of pyramidal admeasurements, appended by this gentleman to BUNSEN's "Ægypt. Stelle," II., 362, a 374.

* According to Chev. BUNSEN, the latest authority. In a MS. list of all the cartouches found in Egypt up to 1841, composed by me at Cairo, 1839—41, I agreed with LENORMANT, "Cercueil de Mykerinus," in considering that ROSELLINI's Ovals No. 2 and 3, were variations of one and the same king *Shoopho*, and as such mentioned them in "Chapters" p. 56. L'HÔTE, ("Lettres," p. 145,) considered them distinct; but within the last few days, Mr. BIRCH has pointed out to me a critical reason why these two ovals belong to *one* king, Cheops.

Mr. Gliddon next directed the attention of the audience to the second Pyramid. This appears taller than the Great Pyramid, in consequence of its being built upon higher ground. But the fact is that it is smaller, covering a little more than 11 acres. It was opened in 1816 by Belzoni. The ascent is difficult for about 130 feet downwards from the apex, though the Arabs go up. Much of the casing is entire. It was built by *Chephren*, according to Greek historians, but the absence of hieroglyphical data renders its builder's name uncertain. It is, however, older than the Great Pyramid.

The third Pyramid is the smallest of the three, but the most beautiful, and surpasses the others in the magnitude of the stones of which it is composed. Part of the red granite casing, which extended half way up its sides, still remains, but the upper portion having been revetted with fine white limestone, its ancient aspect was *parti-colored*. Arab historians (see the authorities in JOMARD, *Remarques*, &c., "Description de L'Egypte,") designate these three, as the Eastern, the Western, and the colored or painted Pyramid; referring to this, which ABD-EL-LATEEF terms the red one. The destruction of the casing of this stupendous sepulchre by the Caliphs, calls forth the just reprobation of this sensible Muslim; and the lecturer here drew a comparison between the science of the Pharaonic Architects 4000 years before the clumsy desecration of the Saracens. He likewise explained BUNSEN's proof, that this mausoleum was constructed at two distinct epochs; and showed by an enlarged copy of BONOMI's drawing how one Pyramid had been cased, as it were, over the other. It was opened in 1837 by Col Vyse. But the Arabs had anticipated him, as he found in it only the broken cover of the King's coffin, (with part of his body (?) now in the British Museum. This cover is of wood, and bears the cartouche of King Men-ke-ra, the builder. The hieroglyphics on it read as follows:—"Hail Osirific King Men-ke-ra, everliving—born of Heaven: descended of Nu-t-pe (mother of the gods), flesh of Seb—thy mother Nu-t-pe is over thee, in her name (fracture in the wood,) she has made thee to be with (another fracture,) the god chastising thy impure enemies, King Men-ke-ra living for ever:"—(BIRCH.) The lecturer referred to this inscription in his first Lecture, as an evidence that the ancient Egyptians believed in the *immortality* of the soul, although this dogma was unknown to the writers of the Hebrew Pentateuch: but see MUNK, ("Palestine," Paris, 1845, pages 147 a 150.)

Mr. Gliddon mentioned six smaller pyramids in the vicinity of these three, and gave some names of kings and queens who were buried in them. He terminated his remarks on the pyramids of Gheezeh, and proceeded to speak of a large number of others: after presenting his audience with a full account of BUNSEN's classification of Manetho's IVth. dyn., B.C. 3229, @ 3109; with the reservation, that LEPSIUS' subsequent discoveries, while they necessarily carry the era farther back, would modify the arrangement of this, and furnish the series of the Monarchs of the Vth. (or *Elephantinite*) dyn., the whole of whose lost names having been restored by the excavations made by the Prussian Commission in the private tombs around the Gheezeh-group of Pyramids. Vyse and Perring, he stated, have described 39 of these monuments, and Lepsius, since 1842, has found the substructures of 30 more, all within a line of 56 miles, each of them being the sepulchre of a king or queen who once lived and reigned in Memphis. (*See Appendix A, page 38.*)

There are 139 Pyramids at and near Meroë in Upper Nubia, which Dr. Lepsius's recent visit has shown to be of modern origin, not one antedating the second century B.C. : and thus the so-called Ethiopian origin of civilization, and the antiquity of Meroë, are monumentally upset. (Cf. *Literary Gazette* ; BONOMI, Cairo, May, 1844, page 414.)*

Most of the Pyramids of Egypt are built of limestone ; four of them, however, are of sun-dried brick. To give some idea of the immense masonry of these structures, Mr. Gliddon stated that the weight of the three large Pyramids alone was estimated at 12,859,460 tons ; and that the materials in the thirty-nine Pyramids described by Col. Vyse would build 3,814 lighthouses of the size of the Bunker Hill monument (Boston, 221 feet high, containing 87,000 cubic feet of granite.) The stone of the Great Pyramid alone would build 1,062 Bunker Hill monuments !

The word "Pyramid" and its signification admit of some discussion. Grecians scholars derived it from *pyr*—fire, or *pyros*—wheat. Better philologists found its roots in the Coptic words *pî* and *haram*. The Pyramids are perhaps referred to in Job iii., 14 :—

"With kings and counsellors of the earth, which built *desolate places* for themselves."

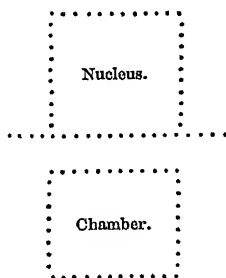
The word translated "desolate places" is, in the original Hebrew, *hara-both*—ruins. By changing the *b* into *m*, a common mutation, we have *hara-moth*—Pyramids : (EWARD apud BUNSEN.) The Arabs of the present day call them *El-Haram*—the ruins, or *the consecrated*.†

* It so happens that I was the first to apply the term *Pyramid* to the published views of the CHAMPOLLIONS, BOSSUET, CAUVILLON, HOSKINS, CHERUBINI, HEEREN, and others,) in subversion of the superannuated theory that civilization descended from so-called *Ethiopia*, and to express doubts as to the fabled antiquity of *Meroë* : (Lectures, 1842 ; Chapters, 1843, pages 43—46, 58—60.) Later researches have thoroughly confirmed my assertions, and my oral lectures have from time to time announced each confirmation. Epistolary communications from Dr. LEPSIUS, after his visit to *Meroë*, and extracts from Dr. ABEKEN's correspondence, obligingly forwarded to me from Egypt, have been duly acknowledged ; but the reader is referred to ABEKEN, "Report to the Egyptian Society," published in the "Bulletin de la Société Géographique," Paris, 1845.

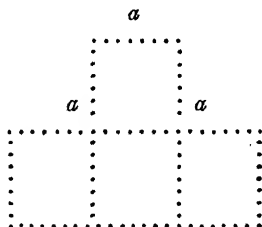
† NAPOLEON's immortal conception, the *Description de l'Égypte* (JOMARD, vol. ix., p. 522 to 536 ; ed. 1829,) furnishes, ZOEGA excepted, ("De Orig. et Usu Obelisc." Rome, 1797, p. 395,) all the more important Coptological authorities on the derivation of the hellenized *πυραμς*, gen. *πυραμίδος*, whence we inherit the word *Pyramid* ; a name current in Egypt in the days of Herodotus, as an indigenous, not a *foreign* designation of a monument, whose *phonetic* appellation, so far I am aware, is yet unknown in hieroglyphics. On this question I had prepared a long note, which the limits of the *Ethnol. Journal* have compelled me to suppress for the present. The Arabian root Ha'R'M, plur. AH'RAM, is still the local name of *Pyramids* in modern Egypt ; and I hold, that all the difference, which time has effected since the time of Herodotus, lies in the substitution of the Arabic article *EL*, *the*, for the Coptic *Pr*, *the*, referred to the root HRM : i.e., We now say *EL-HARAM*, instead of *Pî-HARAM*. Herein I venture to dissent from the crude author of "*Ægypt. Stelle*," II., p. 360. I regret the postponement of the note referred to the more, as its publication would have introduced another philological element into the interesting discussion now pending between two of the best authorities of Hierology, HENCKS, ("An Attempt to Ascertain the Numbers, &c., of the Letters of the Hieroglyphic or Ancient Egyptian Alphabet," Dublin, 1846-7) ; and BUNSEN, "Remarks, &c." (*Egypt's Place*.

Three reasons have been assigned for the peculiar form of the Pyramids. These are the *apparent*, the *doctrinal*, and the *occult*. Of these the lecturer spoke at some length.

At the conclusion of the lecture, Mr. Gliddon described, by means of a black board and a piece of chalk, the mode in which the Pyramids were built. When a King commenced his reign, the first thing done by the Government, after levelling the surface of the rock for the Pyramid's base, was to excavate the chamber intended for his tomb, under ground, with a passage communicating with the surface; and to erect a course of masonry above, which served for the nucleus of the Pyramid, in the following manner:—

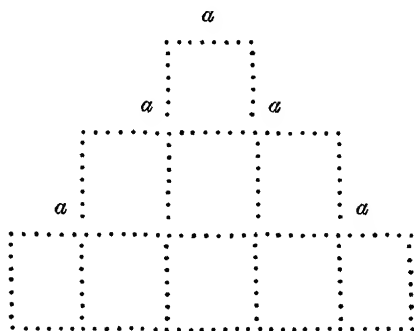


If the King died during the year, the masonry was immediately cased over, and a small Pyramid was formed;—if he continued to live, another course of stone was added in height, and the length of the lower stage increased, thus:— α , α , α , being the new courses of stones added.

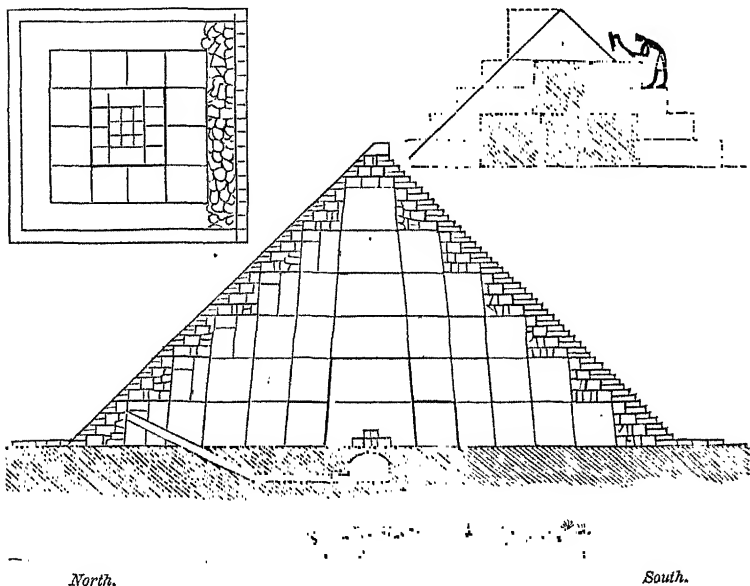


1848, p. 733 to 739.) Without thereby endorsing all the etymologies or linguistic views of the learned LANCY, in regard to the *sacred tongue* of Egypt, my present argument must be restricted to this glance at his admirable analysis of *Hebrew* in his 2nd vol., (parte 8va., cap. 2 do.,) and to the subjoined quotation:—"Quantunque molti credano essere tale e tanto disgregamento dalla Copta all' Araba lingua che tra l' una e l'altra stabilir non si possa una relazione (e di tanto hanno credenza per lo disvedere, o ignorar loro, che ab inizio le Semitiche favelle per *bi-grammatici* nomi acconciate erano); pure se il fatto ci sforza a pensare altramente, convien che quei molti col nostro parer si accuminino, e dicano per lo migliore che, se nelle Semitiche lingue sonole radici de' nomi proprii Egiziani delle primaie loro divinità, è più provevole conveniente che la sagra lingua traantica, innanzi alle piramidi da' Niliaci sacerdoti parlata, non fosse (torno qui anco a ridirlo) l'appellata *Copta*-favella, ma si bene la Fenicia, la Ebraica, o altrettale di cui alcuna valenza nel sermone *Arabico* si mantiene." LANCY, "Paralipomeni all' Illustrazione della Sagra Scrittura," &c., Paris, 1845; II., p. 69, and p. 114. Compare likewise *Ibid*, "Lettre à M. Puisse," 1847; pages 3, 26, 78, 86, 183, 190.—G.R.G.

During subsequent years the same process was repeated, and the Pyramid assumed in time the following form :—*



*The well known courtesy of Mr. BONOMI, than whom, as the associate of the Prussian Scientific Mission to Egypt, none are more competent to define the principles of pyramidal construction by Dr. LEPSIUS discovered, enables me to present a woodcut, which comprehends the main features of the architectural law under discussion. A few observations will suffice.



1. The PYRAMID. The base line of the central illustration represents the level of Memphite alluvium, at high-water mark, say about twenty-two feet above the low Nile; at which season (May), the latter will here average six feet water over the bed of the River. [What may be the depth of the alluvial deposit formed over

The Pyramid thus continued to be increased every year until the death of the king in whose reign it was erected, fresh courses being added each year of his life. When the king died the work of enlargement ceased, and the casing was put on the Pyramid. This was done by filling up the angles of the masonry, *a, a, a*, with smaller stones, and then placing oblong blocks one upon another, so as to form steps, from the base to the apex; after which, beginning at the top, and working downwards, these stones were bevelled off at the corners, so as to form one uniform angle, and give a smooth surface to the Pyramid, leaving a perfect triangle. As each stone of this casing capped the other, so as to leave no vertical joints, Mr. Gliddon eulogised the science and skill of the architect who combined a mausoleum susceptible of yearly increase, without alteration of form, with the ne-plus-ultra of durability when completed.

the limestone-rock, beneath the river, it is impossible to guess. I remember that, in 1834, my friend M. LINANT DE BELLEFONDS, in the course of boring at the head of the Delta, about twenty miles below Ghezeh, struck *bricks* at eighty-two feet below the surface of the alluvial.] A Fellah village, surrounded by Palm Trees, and raised upon the customary ancient mounds, just emerges from the Inundation. Behind it, distant about half a mile, rises the Libyan hill, at the Gheezeh-group some 110 feet in height, surmounted by a Pyramid. The one of which a transverse section is now presented, is not, of course, a copy of any particular Pyramid; but combines the masonic variations of several, in order to elucidate the master-principles of all. [None but that of SHOOPOHO has its sepulchral chambers in the central superstructure of the monument.] The *chamber* in the rock is the royal tomb. On the surface, the first *two layers* of stone form the central nucleus, which at any after stage could be cased over, and become at once a perfect Pyramid; so that the tomb was ready for H. Majesty, "die whenever he saw fit." Above and around this centre, or *nucleus*, outwards and upwards are ranged progressive degrees, composed of massive blocks of masonry. When the *finishing* or filling-up process commenced, the outer angles were filled up with rubble-work; and the outside was reduced to a series of *steps*, one stone each, whereby to ascend the monument. [Such is the *present* surface of the Great Pyramid, since the removal of the *casing*.] The outermost layers, or exterior talus, are the *revetment*, of white limestone, finished off smooth on the *left* side; and here exhibited incomplete on the *right*, to show the method of construction.

[N.B. The *slanting walls*, within the rubble-work, on the left hand, are introduced to illustrate a *variation* in the modus, but not in the law of construction. See sections, &c. of the Pyramid of *six steps* at Saccàra, *Pl. V.* LEPSIUS, "Bau der Pyramiden."]

2. The *APEX* of a Pyramid, illustrative of the process of "*finishing* from the top downwards." An ancient mason, holding the hieroglyphical *adze*, is figured in the act of effacing the salient angles as he descends.

And here it will be remarked, that, inasmuch as each stone of the casing *caps* and laps over another, no *vertical* joints were left in the *revetment*; and the "eternal Pyramid" was impervious to the weather. This is proved by the *casing-stones* discovered by VISE at the base of SHOOPOHO's Pyramid—and "*inter alios*," by those of the *Six-stepped* Pyramid, alluded to by ПОКОКЕ, and figured by LEPSIUS. Two conclusions will strike the observer; first, that a Pyramid, being smooth from its base to its summit, was by its builders never meant to be re-ascended: secondly, that the *entrance* was hermetically closed, never to be reopened; although its location, to judge by classical and Arabian traditions of hieroglyphics on the exterior, was probably indicated by a *royal Tablet*, or *Stele*, commemorative of the Pharaoh interred in each sepulchre. A line of hieroglyphical legends seems also to have been inscribed around the monument, a few feet above its base: the latter being surrounded by a broad platform, or terrace, figured in the above woodcut.

When Herodotus stated, twenty-four hundred years ago, that the Pyramids were *finished* from the top downwards, he was laughed at—but he was right. The lecturer expounded the text of Herodotus in accordance with Lepsius' discovery.*

3rd.—The **BASE** of a Pyramid ; or a *horizontal section* of the undermost tier of stones. In the centre of the inner square, is figured the *first block*, around which are successively grouped the stones that attest progressive enlargement—followed by the second square, indicative of the *rubble-work*—and terminating with the outer square, representing the *revetment*.

Such are *Egyptian* PYRAMIDS, the most perfect of mausolea ever conceived by human intellect, or executed by human skill; whether as regards their capability of expansion in direct proportion to the length of a Monarch's reign—the beautiful simplicity of their architecture—the costliness, variety, and gigantic masses of their materials—their ante-Abrahamic antiquity—or their everlasting durability, had barbarian man not despoiled, at a later age, the venerable monuments of his predecessors.

It will now become evident, that, as there was but *One Pharaoh* on the throne at a time, (syntrophic kings being mere *regents* until the death of the senior ; just as the Prince of Wales was to GEORGE III.), only *one* Pyramid was constructed in each reign ; and therefore each Pyramid is the tomb of a Sovereign,^a whose rule extended from "Migdol to Syene," and was with no others *coëtaneous* : for (aside from infinite and some yet unpublished proofs, in subversion of the *contemporaneous* theory, to be advanced at a future opportunity,) is it, let me ask, in human nature, that a Memphite king, who drew his *granite* from the First Cataract, and his *copper* from Mount Sinai, ruling along a narrow strip of alluvial, bounded on either side of the Nile by hundreds of miles of arid rock, would have wasted treasure and men's labor (and in such huge amounts !) for the puerile vanity of slumbering in a *big tomb* after his death, until, during his lifetime, he had vanquished every (supposititious) competitor, and established his own individual supremacy over all ?

The reader has now before him a prelude to my eventual exposition of *facts* whereby the hypothesis of *dynastic contemporaneity*, during the *Old Empire*, can be destroyed. No one now-a-days, *nisi imperitus*, pretends to such unhistorical expedients for curtailing the monumental chronology of the New.—G.R.G.

* Some Pyramids, like that of MENKERA, are *double*—a later Sovereign, for reasons to us unknown, having chosen to enclose the tomb of a predecessor within his own. This may occasionally reduce the length of a reign below the standard of the apparent size of a Pyramid, but is no exception to the general law of construction.

* *Herod. II., cxxv.*—See LEPSIUS, "Bau der Pyramiden," *passim*; with the *plates* which prove, that the difference of construction in some pyramids, i.e. by *slanting walls* in lieu of *horizontal stages*, does not affect the law of progressive construction. There was no necessity, as PERRING hastily conjectured, for *scaffoldings*; nor could these have been obtainable without enormous outlay in a country where *timber*, except from exotic sources, was, and is so scarce. The acumen of LETRONNE, thirty years previously, had foreshadowed LEPSIUS' discovery, in explaining this passage of *Herodotus* about casing the Pyramids.—"Lorsque tout fut terminé, on y mit la dernière main en abattant toutes les saillies; opération qu'on a nécessairement commencée par le haut (*τα ανωτατα πρωτα*) et continuée de proche en proche, jusqu'à la dernière assise inférieure (*επι τα επιγαια*)."—Cf. LETRONNE'S "*Dicuil*," 1814. It is due to WILKINSON to cite his long-recorded opinion. "Having built the Pyramids in the form of *steps*, they cut away the projecting face of them to a flat inclined surface as they descended; the *steps* serving as a resting place." ("Extracts from several *Itinéraires*," Malta, 1830, page 14, Note.) Through the kindness of Mr. BONOMI, I have been lately favored with PERRIGAL'S pamphlet, "On the probable mode of Constructing the Pyramids;" *Philosophical Magazine*, December, 1844. The ingenious method proposed by the author for elevating

Here Mr. Gliddon made a digression to show that the same *laws* of construction which had guided the builders of Egyptian Pyramids, were visible, owing to the great discoveries of SQUIER and DAVIS, in the aboriginal "*Mounds of the West*;" the difference consisting solely in the material. He showed the principles of American *Mound-building* in Ohio, on a black-board—adverted to *Squier's* and *Davis's* forthcoming work, under the auspices of our Smithsonian Institute—and uttered a hope that the citizens of St. Louis would co-operate in such admirable researches among our innumerable *Mounds*, some of which had been shown to him by our accomplished fellow-citizen, Major M. Lewis Clark. (St. Louis, *New Era*, May, 2, 1848.)*

the stones, is quite new to me, and merits every attention; although I think it hardly fulfils the requirements of the description, given nearly 3000 years after the erection of *Shopho's* pyramid, to HERODOTUS: (II. 124, 125.) Mr. PERRING's suggestion of *scaffoldings* I deem fallacious; first, because no sufficiency of *timber*, adequate to such weights and heights as are inherent in pyramidal erections, could have been procurable at that remote age in Egypt; and secondly, because their adoption, owing to the system of building *by the use of the crane*, is not only impracticable, but a direct violation of the *principle* of construction. Not so, however, his observation of the existence, on the surface of the stones, "of hemispherical holes, each about eight inches in diameter that looked polished or worn by the turning of a heavy body therein." These, Mr. PERRING considers (*Athenæum*, March, 1844, pages 222-3,) to have been places "in which the foot of the mast, or *Derrick*, stepped, the which, with a combination of pulleys, (no evidence yet, that *pulleys* were known to the Pharaonic Egyptians,) and ropes, formed the Crane, or *Machine*, mentioned," by Herodotus. Of course we know nothing about the modus employed by the pyramidal builders, but to my view, of all suggestions hitherto advanced, that of GOGUET approaches nearest to the truth: (*Origin of Laws, Arts, and Sciences*, Edinburgh translation, 1761, vol. III., pages 65-66—*Plute* 3rd.) If his ideal sketch of the *machine* be not exactly such as was used, the *principle* is cognate to it in nature. It strikes me that his *leverage* is too shabby a term for the blocks of stone; and he evidently misunderstood the system of *casing* when he says, "they began the coating of the pyramids from the summit." Herodotus says, *ἐξ ἀνω ἄνω* *doff*: a method perfectly comprehended by L. B. (L. B. Note, p. 164, to Sect. 125.) LEPsius moreover demonstrates, that, by the use of four distinct words (*κρῶσαι*, *βωμίδες*, *αυαβαδμοι*, and *στοιχοι*,) Herodotus describes more than ordinary *steps*, when he explains the aspect of the masonry at different stages of the progressive growth of the Pyramid (loc. cit.) "Au demeurant," I coincide entirely with the following doctrine; "Je suis étonné autant que personne de la patience et de l'adresse que ceux-ci (les Égyptiens) déploient en ces occasions; mais j'ai toujours été fort éloigné de les regarder comme on l'a fait souvent, une *mécanique* aussi perfectionnée, pour le moins, que celle des modernes;" &c.: LETRONNE, *La Civilisation Égyptienne*, Revue des Deux Mondes, 1845, page 27. Compare likewise for similar philosophical views AMPÈRE, *Recherches en Egypte et en Nubie*, 1st and 2nd articles, in the same Journal, 1846.—G.R.G.

* I had long been of opinion, in common with DULAURE ("Des Cultes Antérieurs à l'Idolatrie," vol. I., page 258—Paris, 1828) and HENRY, ("L'Égypte Pharaonique," II., page 141—Paris, 1846) that a *Pyramid*, whether in Egypt or in Mexico, is but a *developed Mound*, marking in its superior structure only a more advanced stage of human progress. Under this view the primeval builders of Egyptian *stone* Pyramids must have previously been "*earth-mound-builders*," elsewhere, probably in Asia. This principle became evident to my senses when, during May, 1847, I enjoyed the privilege of accompanying the accomplished American Archaeologists, my friends SQUIER and E. H. DAVIS, over the ancient mounds of Chillicothe, Ohio. Their grand discoveries were sketched in SQUIER'S,

The philosophical deduction from all this is, that the size of the Pyramid is in direct proportion to the length of the King's reign in which it was constructed, having been begun at his accession and finished at his death. Large pyramids indicate long reigns, and small pyramids short reigns. The *sixty-nine* pyramids, therefore, represent some seventy or eighty kingly generations, (two kings having been sometimes buried in the same pyramid,) the last of which race died before Abraham was born. Such is the *law* of pyramidal construction. Of its importance in *chronology* the reader can judge.*

pamphlet, "Observations on the *Aboriginal Monuments* of the Mississippi Valley," New York, 8vo., 1847—but are now accessible to the English public in vol. I. of the Smithsonian Contributions to Science, "*Ancient Monuments of the Mississippi Valley*," 4to., 1848—John Chapman, Strand. Cf. likewise, *Ethnological Journal*, No. 4, September, 1848. Following the philosophical route of inquiry into American Antiquities first trodden by MORTON, "*Crania Americana*," 1839, *passim*, the transatlantic labors of Mr. SQUIER, which I am happy to know are only commenced, will furnish the elements whereby scientific comparisons may be instituted between the primeval vestiges of man in the *old* world and the *new*, divested of futile and preposterous hypotheses founded upon accidental *resemblances*, where there can have been no intercourse or international connexion. The principles I advocate have been laid down by ROBERTSON, by DULAURE, and others; but are elaborated in WARBURTON, "*Divine Legation*," vol. III., p. 991—and by PAYNE KNIGHT, "*Inquiry*," &c., Society of Dilettanti, 1835, vol. II., sections 229, 230, 231.—G.R.G.

* In the absence of more specific data, chronologists are in the habit (HALES, "*Analysis of Chronology*," &c., 1830; vol. i., p. 80;) of accounting a mean of $22\frac{1}{2}$ years to a *kingly* generation. The vagueness of this estimate was pointed out by the learned PRICHARD, ("*Analysis of Egyptian Mythology*," &c., 1819; note C, p. 138;) who has latterly found it imperative, in order to be consistent with his theory of the *Unity* of the human species, to renounce the factitious limits of biblical chronology in toto:—"there exists," asserts this acute and dispassionate critic, "according to my hypothesis *no chronology*, properly so called, of the earliest ages, and that no means are to be found for ascertaining the real age of the world:" (PRICHARD, "*Researches into the Physical History of Mankind*," 1847, vol. v.; *Note on Biblical Chronology*, p. 569, 570. Compare, also, KENRICK, "*Primeval History*," 1846, p. 57, a 63.) Under this view, however, the ethnological inquirer is presented with a dilemma, either horn of which is awkward to his orthodoxy; because, if grounded on the mythos of Adam and Eve, he contend for *Unity of Race*, he must abandon "plenary inspiration," and with it genesiacial chronology in any text or version of the Pentateuch: or, should he advocate the *inspired authenticity* of Hebrew, Greek, or Samaritan *numerals* for ante-Abrahamic times, he must, on the face of incontrovertible *facts* conceded by PRICHARD himself, abandon the *unity* within human record, neither *time* nor *climate* has ever transmuted a Caucasian into a Negro, or *vice versa*;) abandon the hypothetical primitive *Unity* of the now-diversified species of mankind. This, "en passant;" the object of the present note being to indicate, that, leaving aside the *double* pyramids, (that is, where one king, as in the instance of the *third*, or MENKERA's, has enclosed the tomb of a preceding monarch within his own,) if to the *Sixty-nine* Pyramids, (LEPSIUS, *ubi supra*.) each the sepulchre of a Pharaoh, we allow the mean of $22\frac{1}{2}$ years to a regal generation— $69 \times 22\frac{1}{2} = 1541$ —we obtain a round sum of 1541 years, as the length of the Pyramidal period. And, inasmuch as these monuments, their sizes being commensurate with the reign of the Sovereign each respectively represents, ranged necessarily from about 60 to about 480 feet high, as a minimum and maximum, the above 15 centuries have to be distributed in proportion to the bulk of each pyramid; some falling far below, others greatly exceeding the average of $22\frac{1}{2}$ years to a royal generation.

If we take the two largest Pyramids of Ghcezeh, the first and second, as our maximum, and refer to the historical lists for the length of the reigns of the kings

APPENDIX A.

This great fact, viz., the *discovery* by the Prussians, in 1843, of some thirty *more Pyramids*, ranks, together with the long catalogue of "unplaced" but ante-Abrahamic kings, among the *paralipomena* of recent English chronographers, whose contracted systems, if superlatively orthodox, are nevertheless, in the words of VOLNEY as rendered by BARUCCI, "*petizioni di principii, giudizii senza dis-*

buried in them, we obtain a standard, vague and uncertain it is true, and at best but a mere approximation, whereby to measure the gross amount of regal *life* represented in general by a Pyramid: thus,—

1st Pyramid—	<i>Cheops</i> , according to	Herodotus, II., 134, reigned	50
	<i>Chembes</i> , „	Diodorus, I., 63, „	50
	<i>Saophis I.</i> , „	Eratosthenes, apud Sync. „	29
	<i>Souphis I.</i> , „	Manetho, apud Afric. „	63
<hr/>			
2nd Pyramid—	<i>Chephren</i> , „	Herodotus „	56
	<i>Kephren</i> , „	Diodorus „	56
	<i>Saophis II.</i> , „	Eratosthenes „	27
	<i>Souphis II.</i> , „	Manetho „	66

The lowest of these canons, that of Eratosthenes, yields us more than $22\frac{3}{4}$ years for the builders of these two Pyramids; while the others, among whom MANETHO's is ever the safest authority, give us nearly treble that amount: which, if we duly consider the enormous masses of these tombs, is by no means too little for the labour, time, and expense of their construction.

Taking these monstrous edifices as the standard of time, a survey of VYSE'S Plates will show, that while some small Pyramids represent the lives of kings who reigned, say from one to five years, the greater number will average between fifteen and twenty-five years; and a few, such as the two largest of *Dashoôr*, require an amount of time proportionable to those of SOUPHIS I. and II.

An attempt to base upon the masonry of each pyramid, and the distances whence such materials as the *Granite* (from Syene, 640 miles off,) and the *Arabian Limestone* (from the quarries of Toorah, distant some twenty, across the river,) were brought, would lead to similar results, by which the *effort* expended is indispensable for pyramidal construction: but as the *size* of the *pyramids* discovered by LEPSIUS are yet unpublished, it is vain at present to attempt their computation. Similar conclusions might be deduced from the assertion of HERODOTUS (II., 134), that it took 106 years to construct the two largest; but, even allowing with the "Father of History," who, 3000 years after the event, could gather but slight information about this and other subjects, through his "Dragoman," *twenty years* (without the *Causeway* that occupied *ten*,) for the erection of the largest Pyramid—in which account he was copied by the clumsy plagiarist, DIODORUS—or estimating with PLINY (lib. XXXVI., cap. 12, 978,—a worse authority,) that the three Ghizeh Pyramids employed, in building, seventy-eight years and four months, we shall always exceed the average of twenty-two and one-third years for a kingly generation in respect to the Tomb of CLEOPAS; which ratio, distributed proportionably among the sixty-nine Pyramids, will yet approximate to the *fifteen centuries* claimed by me as the minimum length of the *pyramidal period*.

The *pedigrees* of private individuals, and the *genealogical* legends (among them, the kings of the lost *Elephantinite*, or 5th Dyn., suppressed as *contemporaneous* by BUNSEN,) discovered by LEPSIUS in the Memphite Necropolis, will check these calculations.

A period of 1076 years for the duration of the *Old Empire*, according to the 38 kings of Eratosthenes, is that selected by Bunsen, ("*Egyptens Stelle*, II," p. 122,) although the same erudite Egyptologist shows, that Manetho's estimate for the Pyramids was "*thirteen centuries* in round numbers:" ("*Egypt's Place*," p. 133, 134.)

The "*thirty more Pyramids*," discovered by Lepsius, (see *appendix A.*) having superseded that computation, the indulgent reader will believe, that when, in round numbers, I take *Fifteen Centuries* for the Pyramidal Period, other *facts* are in reserve for their support.—G. R. G.

cussione, decisioni senza prove, e ravvicinamenti senza analogia." Confined at present to a brief note, I can but refer to *Chapters*, pages 51 and 57, and particularly to page 60, wherein I mentioned, that my own List of Unplaced Kings, (collected during travels on the Nile in 1839-40) who preceded the XVIIIth Dynasty, amounted in 1841, without reckoning those since published in the *Turin Genealogical Papyrus* (LEPSIUS, *Auswahl*, 1842,) "to about 180 Cartouches as an approximate extreme." Many new royal names have since been added by M. FRISSÉ and others; but the reader is referred to the admirably illustrated *Annuaire* sopra la Cronologia Egizia, del Professore FRANCESCO BARUCCHI, Torino, 1844-6," to understand how the historical lists of Herodotus, Diodorus, and Manetho, are susceptible of adjustment to the extent of 450 Kings *circa*, who ruled from MENES to CAMBYSES; which, in Dr. LEPSIUS' portfolio, 1842, were represented by about 400 royal ovals recorded in the hieroglyphics; whereas ROSELLINI's tables, in 1832, comprised but 170 Cartouches: (BARUCCHI, *Discorso* 4to.) This is explained by the circumstance, that the erudite Pisan did not enter into pyramidal disquisitions, in that day unexplored by VYSE and PERRING, on the ground that "né a me occorre indagare più addentro in tanto buio di tempi." (ROSELLINI, M.S., vol. i., page 111;—1832.) The great increase of these "Unplaced Kings," owing to researches posterior to ROSELLINI, CHAMPOLLION, and WILKINSON, is unnoticed in the year 1848 by Dr. NOLAN (*Egyptian Chronology analysed, &c.*), and is but faintly alluded to by Chevr. BUNSEN; in the German edition of "*Egypt's Place in Universal History*," Hamburgh, 1845, because in that day BARUCCHI's work had not appeared; nor in the English translation of 1848, because only the 1st vol. is yet before the public. My lectures have therefore maintained, that the gross amount of *Cartouches* collected by Dr. LEPSIUS must be known, before valid opinions can be expressed as to the remoteness of the era of MENES, still oscillating between the 36th and the 58th century, B.C.—(*Chapters*, 10th to 12th editions, *Appendix*, 1846, pp. 3 and 4.)

The primary item of the above *paralipomena*, i.e., LEPSIUS' discovery of thirty additional Pyramids, although reiterated in my American discourses since the autumn of 1843—commencing at Boston before the *Lovell Institute*—has been, less accountably, overlooked by recent sustainers of a limited chronology, in itself spurious and effete. The substance and history, long before the public, are as follows:—

At a General Meeting of our "Egyptian Society," held at Cairo, 17th August, 1843, Dr. LEPSIUS read a paper explanatory of the result of seven months' exploration, by the Prussian Commission, over the pyramidal necropoles from Memphis to the Fayûm. A synopsis of this address, with the author's obliging consideration for a colleague then 6000 miles from the centre of discovery, was transmitted by my lamented father, U. S. Consul for Egypt; and reaching me at Philadelphia in October of the same year, served as the basis for my first course of lectures on the Pyramids. Recollection of Memphite topography convinced me, that more Pyramids than those figured in VYSE's 3 volumes, 1839-42, might readily be found; at the same time I recognised that the grand enigma—the *law of pyramidal construction*—was solved by the Prussians, if nearly reached by a shrewd guess of LETRONNE, *Dicuil*, pages 90 to 115, plate i., in 1814!

The public press supplied further information: see London *Athenæum*, BONOMI's Correspondence, 16 Sept., 1843; PERRING's Objections, March, 1844; W. R. WILDE, Claiming Priority of Discovery, 20 April, 1844; J. W. WILD, Corroborating LEPSIUS, 15 June, 1844; London *Literary Gazette*, BONOMI's Letter, 1843, p. 603. Some of the woodcuts published by these gentlemen, were duly enlarged by me into pictorial diagrams, in illustration of the invaluable discovery.

A gratifying rencontre with Dr. LEPSIUS himself, during his visit to London, August, 1846, supplied me with a copy of his pamphlet, "*Über den Bau der Pyramiden*," being a sketch, illustrated by plates containing sections, &c., of his discovery of the "Construction of the Pyramids," dated Cairo, May, 1843.

To this ingenious and most important essay I refer the reader, limiting myself now to an extract from the manuscript, and, I grieve to add, still unpublished translation made by Mr. HILL, of the R. Soc. of Literature; for the perusal of which, in the summer of 1846, I owe this gentleman my warm acknowledgments.

The first paragraph, after remarking that the Prussian researches, 1837-39, were restricted to the more prominent of pyramidal vestiges, asserts, that the Prussian Commission, over the same field, in 1842-3, had gleaned the sites of "THIRTY

OTHER PYRAMIDS, *entirely unknown either to him (Mr. Perring), or to any preceding travellers.* Of these, not a few are of very considerable extent, bearing evident traces of the mode in which they were raised, and surrounded by the ruins of *Temples*, and extensive fields of tombs or burial-grounds. All these Pyramids, without exception, belong to the *ancient kingdom of Egypt before the irruption of the Hykshos*, who invaded lower Egypt about the year 2000 B.C.; and the whole of them were erected (those at least between Aboorooash and Dashdôr) by kings who reigned at Memphis. To the same period belong also the majority of the *effaced* tombs, of any importance, which surround them, which is evident from the fact that, at a later period, the richest and most honorable families of the country, who could display greater magnificence on their tombs, no longer resided at Memphis, but at Thebes, which was also the regal residence."

If, then, to the thirty nine pyramidal tombs figured in VYSE'S work, the reader will add these thirty newly-discovered substructures, the upper materials of which were used as quarries possibly by the Hykshos and the Restoration, but certainly by the Arab Caliphate and the present "Re pastori," (see my *Appeal to the Antiquaries*, &c., London, 1841, pages 133—4—5,) he will perceive, that in Lower and Middle Egypt there are still extant at least *sixty-nine* royal sepulchres, which must represent the funereal habitations of *more than sixty-nine* kings and queens of the *Old Egyptian*, or ante-Abrahamic empire; because some Pyramids ("inter alios," those of *Shoopho* and *Menkera*, of *two Inclines*, and of *Six Steps*,) are the tombs of at least two sovereigns; for it seems to me demonstrable, from the laws, objects, and essence, if I may use the term, of pyramidal construction, that no *queen* was buried in a separate Pyramid, unless, like AMENSE of the XVIIIth dyn., she ruled alone, either as a widow, or in her own right, as did NIROCIS of VIth dyn., (Cf. MANETHO, second dyn., sub nomine ΒΙΟΡΗΣ, apud CORY or BUNSEN,) : the Pyramids being, according to my view, of successive, and never of *coëtaneous* erection. The proofs of the validity of this doctrine have been copiously detailed in my American lectures since 1843.

These are stubborn facts that nullify all astronomical and cyclic theories, when applied to human *primeval* history (vide LETRONNE'S exposure of their general fallacy, notwithstanding their endorsement by NEWTON, DUPUIS, or BIOT, in "Représentations Zodiacales," Paris, 1846,) put forth, even in 1848, by the learned author of "*Egyptian Chronology analysed*," by whom the existence of *sixty-nine* Pyramids, as well as of all the "Unplaced Kings," is *completely deduced*; and this is the reason why, aside from other critical objections, ERATOSTHENES' *Laterculus*, while grateful for the author's skilful restorations of the text, I have not adopted CHEVR. BUNSEN'S ingenious hypothesis (*Ægypt. Stelle*, vol. ii., p. 340, et seq.) that "the great Pyramids correspond with the rulers of the Old Empire in Eratosthenes;" simply because thirty-eight *Sovereigns* could not have been eligibly entombed in sixty-nine *Sepulchres*; "thirty *more* Pyramids" having been discovered by LEPSIUS, since "the finishing stroke was put to the second book in December, 1842."—(*Ibid.*, Preface to Eng. Ed., p. xv.)

Incredible as it may seem, no one has actually counted the Pyramids, prior to LEPSIUS' visit in 1843!

Thus, of the ancients, HERODOTUS speaks of but three; DIODORUS refers to six; STRABO alludes to "a great many;" PLINY, with a threnody at "regum otiosa et stulta ostentatio," so becoming in a *Roman*, describes three; but happily adds, (inasmuch as it proves the contrary, viz., that some Pyramids had been already mutilated, others destroyed, and their superstructures removed *prior to the Christian era*,) "there exist traces of a great many which are but commenced." POMPONIUS MELA, in referring to three, leaves the reader to infer the existence of others. The Muslim historians, excepting ABD-EL-LATEEF, who speaks of "the great number," rarely mention the subject of carelessness on more than three; while, of European and other travellers, from GREAVES down to JOMARD, and still later to WILKINSON, (Middle Egypt and Thebes," 1843,) none have attempted such a specific enumeration as PERRING published in 1842. (See also his admirable Table of Pyramidal Statistics above quoted, in BUNSEN, *Ægypt. Stelle*, 1845.)

Bewildered by these inaccuracies, and never having thought, during frequent encampments on the Memphite burial-ground, of counting these mausolea myself, the non-reception of VYSE'S 3rd volume, when I published at New York in March, 1843, threw me upon memory of the localities for the number of Pyramids from Aboorooash to Dashdôr; and in my *Chapters*, p. 57, I roughly estimated "some

twenty-five Pyramids and Pyramidal tombs in the cemetery of Memphis," drawing sundry chronological deductions from that number, p. 57-8.

Those calculations are erroneous, solely in being too limited; for PERRING's *Appendix to VYSE* (received by me in June, 1843,) enumerated thirty-nine Pyramids; and subsequently LERSIUS, by adding thirty more, furnished *sixty-nine* royal tombs, in lieu of my estimate of twenty-five, without averring that the sand and débris may not conceal the traces of others. On amending my calculations, in after lectures, a multitude of processes, many of which, from ignorance of Egypt as a country, have been disregarded in accounts heretofore published, have led me to assume a period of about *fifteen centuries* of human life to be attested by the *Pyramids*, without absolutely defining when this period *ends*: although if we accept a series of Hykshos irruptions (Phœnician, Arabian, and possibly Indogermanic,) into Lower Egypt, as the only legitimate method of reconciling Hebrew traditions with the *silence* of the hieroglyphics, a period from the twenty-third to the nineteenth century, B.C., for this cessation, appears to me to be historically probable: while for the ante-Pyramidal times of the occupation of the Nilotic Valley by Asiatic nomads, as well as for the appearance upon earth of humanity in general, I hold that we possess as little *chronological* data as science has hitherto elicited from palæontological remains: nor can any approximation be reached until some future geological measure the alluvial deposits of the Nile or the Mississippi. [In the proof-sheets of this note, a letter from an American Savan, Dr. J. C. NOEL, informs me that Dr. DICKSON, in a recent paper, gives geological testimonies that the *Delta of the Mississippi* has not been less than 14,000 years in its formation. The geological antiquity of Egypt will be touched upon in the succeeding discourses on *Mummification*.—27th Nov., G. R. G.]

Short chronologists can explain away these *facts* as their ingenuity, and favorite habit of suppression, may suggest; but, until Dr. LERSIUS puts forth the still unknown treasures in his possession, whilst I deem the yet unexplored chronology of the "stone books" of Egypt to have annihilated all *geological numbers* for epochas anterior to the uncertain era of ABRAHAM (Cf., aside from the host of biblical Exegetists from ETCHHORN to DE WETTE, to me very familiar, "A Vindication of Protestant Principles," by PHILELEUTHERUS ANGLICANUS, London, 1847, pages 137 to 146), I am fain to confess, notwithstanding the herculean labors of BUNSEN, that "the *whole* of this part of the subject requires a *careful re-casting*," in November, 1848, as much as in 1843, when BIRCH wrote his preface to Part 2nd of "Gallery of Antiquities in the British Museum." The generality of writers who, since ROSELLINI's demise, have put forth precise systems of Egyptian Chronology, have proceeded upon the presumptive authenticity of Greek lists, in an effort to adjust their mutual contradictions with Judaico-Christian cosmogonies, instead of re-building the edifice of Pharaonic antiquity, cartouche by cartouche, and still more indispensably, *monument* by *monument*, in accordance with the geological and topographical features of the country itself, and the laws of archæology; through which the current notion of the physical possibility of any *contemporaneous* Egyptian dynasties, or of any coëtaneous Pharaohs beyond an occasional synthronic Father and Son (as among the SESOURTASENS and AMENEMHES of the XIIth dyn.—Conf. HINCKS, "on the Egyptian Stele"—Trans. R. Ir. Acad.—part II., 1843, page 68: also BUNSEN, II., 290;) or a momentary interval of anarchy, such as that implied in the *Dodecharchia* preceding PSAMMETICUS, is susceptible of a "reductio ad absurdum."

Cartouches have latterly been shuffled about, like cards in the hands of a prestidigitator, without the slightest regard to their respective *monumental* relations; and the genealogical tablets and papyri are curtailed or extended "à coup de plume;" without taking into account the names of numerous kings, edited and unpublished, whose stone-records bear witness that each "lived, moved, and had a being" in the valley of the Nile, as surely as SIESIONK, THOTMES, SESOURTASEN, or SHOOPHO.

Science at the present day requires, what there is every reason to presume it will receive from LERSIUS, a chronicle of Egyptian Pharaohs from the *hieroglyphics* and *monuments*, just as if Hebrews, Greeks, and Romans, imbued with Chaldaic, Hierosolymite, and Alexandrian scholastic dogmata, had never foisted their cosmogonical speculations, cyclic concordances, or synchronising artifices, upon the indigenous and independent annals of a country which, with the exception of the since-emasculated MANETHO, and possibly a few others, not one of these

classical worthies seems to have understood a syllable, any better than HERODOTUS when he rendered ΠΙ-ΡΟΜΙ, *the-man*, by καλος κ' αγαθος ! (Lib. II., Sect. 143—but vide KENRICK, "Egypt of Herodotus," 1841—Note, page 185.)

Prior to the Christian era, the very date of which is itself a disputed point, (see *Chapters*, p. 33,*) theological controversy had not intruded itself into scientific inquiries regarding the length of time man has inhabited the earth, equally unknown 5000 years ago to the builders of the Pyramids as at this hour to ourselves. "Each nation, whether Greek or barbarian (says DIODORUS), has foolishly pretended to have been the first to discover the comforts of human life, and to have preserved the tradition of its own history from the very *origin of the world*." This is the third axiom laid down by the founder of historical criticism, the Neapolitan VICO, whose work, if a hand-book to every continental authority, seems quite forgotten by English historiographers: ("Scienza Nuova," 1725—translation MICHLETT, vol. I., p. 337—II., 1).

It is this inveterate habit of suppressing *monumental* facts by "modern Chronologers" which still renders applicable the lament of R. PAYNE KNIGHT:—"They are, however, too apt to confound personages for the sake of contracting dates; which being *merely conjectural* in events of this remote antiquity, every new system-builder endeavours to adapt them to his own prejudices; and it has been the fashion, in modern times, to reduce as much as possible the limits of ancient history, whole reigns, and even dynasties [compare *Egypt*, &c., analysed, London, 1848, passim, with the *Pyramidal* data herein: seen annihilated with the dash of a pen, notwithstanding the obstinate evidence of those stupendous monuments of art and labor, which still stand up for their defence." (*Inquiry into the Symbolical Language of Ancient Art and Mythology*—London, 1818—Section 149—Soc. of Dilettanti, vol. II., 1835.)

* "The 'true' date of the birth of Christ is 'four years' before the common æra, or A.D."—Rev. Dr. T. H. HORNE, 'Introduct. to the Crit. Study and Knowledge of the Holy Scriptures,' 8th edit., London, 1839, vol. III., pages 527 and 535.

"The date being taken of December 25, by reckoning back thirty years from his baptism, we come to his 'birth,' A. J. P. 4707, 'six years' before the common era."—Rev. Dr. S. F. JARVIS, 'Chronological Introduct. to the Hist. of the Church,' London, 1844, pages 533, 563; and Preface, p. vii.

"Abp. Newcombe could say, 'Jesus was born, says Lardner, between the middle of August and the middle of November, A. U. C. 748 or 749. (Cred. I., 796, 9, 3rd ed.) We will take the 'mean' time, October 1.'!!" . . . *IBID*, page 563.

"Christ born, anno mundi, 3928" . . . "And now hee that desireth to know the yeere of the world, which is now passing over us this yeere 1644, will find it to bee 5572 yeeres just now finished since the Creation; and the year 5573 of the world's age, now newly begunne this *September* at the *Æquinox*." . . . LIGHTFOOT, 'Harmony of the Four Evangelistes,' London, 1644, 1st part, prolegomena, last page.

"It is, besides, generally allowed by Chronologists, that the beginning of the patriarchal year was computed from the autumnal equinox, which fell on *October 20th*, B.C. 4005, the 'year' of the 'Creation.'" . . . Rev. Dr. F. NOLAN, 'The Egyptian Chronology analysed,' &c., London, 1848, page 392.

ANNO MUNDI I.—'Vith 'day' of Creation" . . . "his (Adam's) wife the weaker vessel: she not yet knowing that there were any Devils at all . . . sinned, and drew her husband into the same transgression with her; this was about 'high noone,' the time of 'eating.' And in this lost condition into which Adam and Eve had now brought themselves, did they lie comfortlesse till towards the cool of the day, or 'three a'clock afternoone' . . . (God) expelleth them out of Eden, and so fell Adam ON THE DAY that he was created."—LIGHTFOOT, 'Harmony, Chronicle, and Order of the Old Testamente,' &c., London, 1647, page 5.

"The reader will not need any rules for the explaining of this Table, his own ARITHMETICK will soon shew him 'what use' to make of it."—*IBID*. p. 6.

[*Postscriptum*.—Owing to one of those oversights which enter in to the category of "regrets d' Auteur," in the course of transferring Mr. Bonomi's drawing (p. 33,) to the block, the *Pyramid* has been reversed! The critical reader is requested to transpose the *passage into the subterranean Chamber* from the *left* to the *right* hand; and by reading "*North*" for "*South*," the error will be corrected.]—G. R. G.

LECTURE V.

The Pyramids, Concluded.

THE introductory remarks to this discourse set forth, that the initial point of the Pyramidal era extended so far back into the darkness of primeval ages, that its commencement is unknown. When the building of the Pyramids began, the arts and sciences must have been in a high state of cultivation, otherwise such structures could not have been built. The riches of the country, and the peaceful character of the inhabitants, tempted the Hykshos from the East. Their invasion may be compared to that of the Roman Empire by the Barbarians. The Hykshos seem to have ruled in Lower Egypt from the days of Abraham to that of the "Pharaoh which knew not Joseph." It is probable that the kings mentioned in Genesis xiv., from whom Abraham rescued Lot, were Hykshos; which led the lecturer to explain, by biblical passages, and by Josephus, that the sojourn of the Israelites in Egypt being comprehended in the Hykshos-period, when the oppressed Egyptians built no monuments, it cannot be reasonably expected to find *hieroglyphical* annals of the events that occurred from Abraham down to Moses. Syncellus (a poor authority,) says that Joseph was prime minister to *Apophis*, a Shepherd King; and it is clear, from Rosellini's explanation of Genesis xvi., 32-34, and xlvii., 3-6, that the king then on the throne of Memphis was a "Shepherd," who had arrogated to himself the Egyptian royal title of PH-RA, *the Sun*, the original of our word *Pharaoh*. He showed by Exodus i., 8, that a change of dynasty must have occurred in that day; which verse marks the expulsion of the Hykshos invaders, and the return of the Egyptian monarchs from Thebes to Memphis; thus indicating the commencement of the Restoration under AMOSIS or AAHMES, founder of the eighteenth Dynasty, the portrait of whose son, Amunoph 1st, he also pointed out in his Illustrations—although the original *lived* some thirty-five centuries ago! He urged our citizens to place the works of the *Champollionists* in our public libraries.

The "Pharaoh which knew not Joseph" arose in Egypt about 1600 @ 1800 years B.C., and drove out the shepherd kings. The era of the Restoration, under the 18th dynasty, commenced with this king. It continued until the invasion of the Persians, B.C. 525. This later period has an almost perfect monumental history.

The several periods of Egyptian history may be divided as follows:—

1.—The ante-monumental period.

[This of course is an utter *blank* in Chronology. Science knows not where chronology ends, and humanity begins; and the definitive, or hypothetical, systems current on the subject, are of modern adoption and spurious derivation.]

2.—The pyramidal period.

[Occupying, according to Mr. Gliddon's view, about fifteen centuries; probably beginning with Manetho's second dynasty, and ending with the twelfth or thirteenth, about twenty-two centuries prior to the christian era.]

3.—The period of the Hykshos.

[There being no *monuments* for this period extant, with the exception

of the names chronicled long after on the "Chamber of Karnac," (PRISSE, "Notice sur la Salle des *Ancêtres* de Thouthmés III." 1845), here is the *grand* difficulty in Egyptian chronology; it being impossible to determine its duration: which Mr. Gliddon considers to be far shorter than is estimated in the "*Ægyptens Stelle in der Weltgeschichte*,"* and to embrace all *scriptural* connexions with Egypt from ABRAHAM to the *Exodus* inclusive; on which the *hieroglyphics* are utterly silent.†

4. The positive historical period.

[Commencing about 1600 to 1800 years before Christ, with the *New* Empire and the *Restoration*, after the expulsion of the Hykshos tribes, under AAHMES, the founder of XVIIIth. dynasty.]

The lecturer went on to explain how and why during their sojourn at Memphis, (if they were there at all) the Hykshos broke open and desecrated

* It may be useful to the reader to have other references before him, and the following is clipped from the *Philadelphia Public Ledger*, November 19th, 1846; which paper, under the caption of "Lounges in Mr. Gliddon's Lecture-room," gave synopses of other discourses:—

"Mr. Gliddon next considered some of the documents more recently deciphered. Among these are the "Ancestral chamber of Karnac," and the Genealogical Papyrus discovered by Champollion in the Museum of Turin; which, having been in part deciphered by Dr. Lepsius, Mr. Birch, Dr. Hincks, and the Chevalier Bunsen, was exhibited to the audience, and contains a list of the Kings of Egypt from the mythic reign of the Gods, down to the Ramessides of the nineteenth dynasty, about the fourteenth century B.C. The length of each reign and the sum of each dynasty, were once extant in this precious chronicle.

"Reference was then made to the chronological views contained in Bunsen's work. [*Ægypt. Stlle*, III., pages 122-3.] Bunsen divides Egyptian history into three great empires, the *old*, the *middle*, and the *new*.—The old begins with Menes and terminates at the construction of the Labyrinth, embracing a period of 1,076 years. The middle empire includes some of the scriptural events relating to Egypt, and embraces a period of 929 years. The new kingdom, beginning with Aahmes, the founder of the eighteenth Theban dynasty, ends with the invasion of Cambyzes, and includes a period of 1,113 years. From Cambyzes to the Christian era is a period of 525 years, which will, according to Bunsen, place the era of Menes at the distance of 3,643 years before Christ. This is, of course, entirely at variance with the received chronology; and Mr. Gliddon, after recounting the various discrepancies among Biblical chronologists, stated that the undeniable inference was that there is no chronology taught in the Bible, and that no dates are given prior to the days of Abraham from which it can be deduced. Chronology must, he said, be studied as an *universal science*, taking in the records of all people before it can attain any degree of accuracy."

In the *Appendix* to the 10th & 12th editions of my 'Chapters,' 1846, I mentioned that LEPSIUS' forthcoming "Book of Kings," would carry the era of *Menes* some centuries earlier than B.C. 3643. It has not yet issued from the press, but I hear that Dr. LEPSIUS places *Menes* about thirty-nine centuries B.C.—G.R.G.

† Who are the *Hykshos*? A lecture of the course delivered at Boston before the "Lowell Institute," (reported in the *EVENING TRANSCRIPT*, November 1st, and *MERCANTILE JOURNAL*, November 2nd, 1843,) after presenting various theories as to their having been Phœnicians, Canaanites, &c., &c., contained the following answer:—"In investigating the early history of the world, the *Hykshos* cross our path like a mighty shadow, advancing from native seats to which it baffled the antiquaries of antiquity to assign a fixed position, covering for a season the shores of the Mediterranean, and the banks of the Nile, with the terror of their arms and the renown of their conquests, and at length vanishing with a mystery equal to that of their first appearance:"—(Mrs. HAMILTON GRAY, "Hist. of Etruria," Part I, page 26.) Later investigations have rather increased than removed my difficulties; and, as a mere matter of argument, it would be indifferent to me to sustain that the *Hykshos* once occupied Lower Egypt, or that they

the Pyramids. After that, the mode of burial was changed, and the kings, subsequent to the Restoration, were buried in tombs at Thebes instead of Memphis, in concealed subterranean galleries; in lieu of sepulchres, like the Pyramids, *exposed* to view, and from the Hykshos-days to the present hour inviting curiosity and spoliation. His description of the localities at Memphis and at Thebes, aided by his diagrams, rendered this speculation more than probable.

Mr. Gliddon proceeded to give some account of the wonderful discoveries that had been made in the tombs of private persons scattered around the regal Pyramids, coeval with the erection of the latter; and alluded to the arts and sciences which were painted on their walls. Lepsius, 1843, opened 106 of these tombs, and found in them a vast number of paintings, which repre-

were never there at all, as others besides myself have suspected:—(HINCKS, "On the Letters of the Hieroglyphical Alphabet:" Trans R. Ir. Acad. vol. xxi, part II., 1847, page 35.) The latter view might result from a rigid inquiry into the validity of the historical sources; the total absence of direct allusion to the Hykshos in the *hieroglyphics*, and the necessity of interposing an immeasurable hiatus between Cartouches No. 39 and 40, in the *Tablet of Abydos*. (Compare HINCKS, "Egyptian Stele," 1841, page 68; with BU SEN, "Egypt. Stelle," II., p. 277, for LEPsius' discovery in 1840, that the "*Tablet of Abydos* jumps over the whole of the Hykshos-period:" IRBY, "Egypt's Place," I., pages 42, 49, 52.) The former, however, is susceptible of much negative proof, and its adoption seems to me necessary to the chain of biblical history, no less than explanatory of the monumental chasm, and alterations of sepulchral architecture, which separate the twelfth from the eighteenth dynasty. How can we otherwise explain the cessation of Pyramidal Monuments at Memphis, and the transfer of royal sepulture, in a style totally distinct, to Thebes? How account for the silence of the hieroglyphics on all that concerns the sojourn of the Israelites, (vide JOSEPHUS, *contr. Appion*, lib. I., c. 14, 15, 26, 27,) unless we allow a period when Lower Egypt was the spoil of foreign hordes? and what other place are we to assign to the thirty Kings in the right division of the *Chamber of Karnac*, if they did not reign in Upper Egypt *simultaneously* with the Hykshos in Lower?

The time for the duration of the Hykshos dominion seems to me quite problematical; but let not the sticklers for the short chronology triumph on that account. I presume that the most orthodox of the latter who has really mastered Egyptian discoveries, (and on this question the opinions of those who have not are worthless,) will grant the commencement of the eighteenth dynasty, at some epoch between the fifteenth and sixteenth century B.C. Let him, after due verification of the pyramidal data, add at least *fifteen* centuries for the *Pyramids* to the year 1500 B.C., and he will reach 3000 years B.C. as the narrowest limit for which we possess *contemporaneous Egyptian Monuments*—a result utterly destructive of Archbishop USHER's *deluge* at B.C. 2348! (*Chapters*, p. 33 & 38.) I leave him to contract or to extend the intervening *Hykshos-period*, on a "sliding-scale," according to his fancy; while I would suggest to his dispassionate consideration, as a scientific and not a theological problem, that for the days *prior* to the Pyramids, or anterior to B.C. 3000, we possess no standard wherewith to measure the unnumbered centuries, geology will tell him, that the Nile has annually deposited alluvium, adequate for the growth of human subsistence, in the Egyptian Valley.

We are dealing, in events so inconceivably remote, with *stratified masses of time*, and not with supposititious calculations of the *exact* day, week, month, or year; in futile attempts to ascertain which so many learned investigators "ne font qu'un trou dans l'eau."

One final observation.—Misled by modern* English Divines, whom I had been taught erroneously to look upon as *authorities* in biblical criticism and chronology, I attempted in 1842 to reconcile Egyptian Annals with the *Septuagint* computation, (*Chapters*, ubi supra, and pages 51, 52, 61); pointing out at the same time that I

* By the adjective *modern*, are intended those of a distinct school to the WALTONS and KENNICOTTS of past University generations.

sent the manners and customs of the Ancient Egyptians 5,000 years ago. These discoveries corroborate those made in the Pyramids, and furnish abundant genealogical lists, royal and private, by which all the Pyramids will be classed seriatim. So full and accurate was the knowledge to be derived from these representations, that Lepsius promises to "write the *Court Journal* of the 4th Memphite dynasty"—of kings who died above 5,000 years ago! This will finally demonstrate the utilitarian bearings of these discoveries upon the popular education of our age, with the folly of perpetuating classical fables that are now annihilated by monumental facts.

Mr Gliddon showed, among other things, how *Glass* manufacture was known in Egypt 2,000 years previously to its reported discovery by the Phœnicians; and how the decimal system of numeration, *units, tens, hundreds, thousands*, and upwards, was current in the days of the Pyramids, or 4,000 years before the Arabs of Mohammed's era. In the tomb of EIMER, architect of the Pyramid of Shoorno of the fourth Dynasty, is an Inventory of his wealth. There are amongst other details, "835 oxen, 220 cows, with their calves, 2234 goats, 760 asses, and 974 rams." The numerals are hieroglyphical *ciphers*; and the same decimal system is found in the *quarriers' marks* on all the Pyramids. Indeed, it became evident that, perhaps, with the exception of steamboats, electrotypes, daguerrotypes, the magnetic telegraph, chloroform, printing-presses, and cotton gun-powder, the arts and sciences were much the same at that early period in the valley of the Nile as at this time in our own country. The drawings of the trades, as found pictured on the walls in the Tombs, show the practical sort of people the Egyptians were.—The Lecturer here pointed out in the paintings upon the wall, carpenters at work, boat building, musicians, poulterers, veterinary surgeons, wine-pressing, brick-making, weaving, ploughing, transporting of columns, &c.

He stated that the deductions of the hierologist may be checked and verified by the narrations of the Greeks, and by mathematical calculations which show the great length of time necessary for building the Pyramids—at least 1500 years from first to last, beginning with the second or third dynasty, and ending with the twelfth or thirteenth.

Mr. Gliddon next treated on Lake Moeris and the Labyrinth.

entertained strong doubts as to the validity of my endeavors. Since that day, these philosophical heresies have been abandoned as untenable; and having devoted four years to hebraical studies and the works of continental *exegetists*, my oral lectures have been conducted upon different principles. The indulgent reader will allow me to apply to myself the frank avowal of LETRONNE in justification of this change of opinion:—

"J'ai partagé les mêmes idées dont je me trouve si éloigné maintenant. Ma première éducation, . . . devait naturellement m'y conduire. Et moi aussi j'ai cru fermement à l'explication des anciennes fables par l'astronomie; . . . j'ai cru à la civilisation primitive tombée du ciel sur le plateau de la haute Asie, au peuple ante-diluvien, à sa science infuse, et à la grande mesure de la terre, qu'il aurait, dit on, exécutée de temps immémorial, avec une exactitude que nous ne pouvons surpasser malgré nos théodolites, nos cercles répétiteurs et nos autres instruments de précision. Il n'a pas fallu moins que l'étude approfondie des textes anciens et celle des *faits* les mieux avérés, dont le temps a depuis amené la connaissance, pour m'arracher à ces illusions de ma jeunesse: et encore à présent, je me surprends, pour ces brillantes hypothèses, la sympathie involontaire et secrète que nous éprouvons partout dans ce qui a été, de notre part, l'objet d'une vive et

Lake Moeris was situated in that part of Lower Egypt known as the Fayoom. [*El-Fayoom* of the Arabs is derived from the Coptic name P-IOM, *the watery*, corresponding to the Hebrew IAM, *sea*, in consequence of its ancient aqueous state during the inundation; or from PHI-OMI, *the cultivated*, owing to its later fertility: (CHAMPOLLION, "L'Egypte sous les Pharaons," 1814, I., page 325.) Its *hieroglyphical* name, discovered by Mr. A. C. HARRIS, reads, "Land of the Crocodile."] The Greeks, translating its Egyptian name, called it "Crocodilopolite Nome," derived from the vast number of crocodiles which once inhabited the Nile in that vicinity. There are none now to be found in Lower or Middle Egypt. They exist only in Upper, commencing at the Thebaid. A Queen Arsinoë, in the time of the Ptolemies, gave her name to the Fayoom, and in classical history it is commonly known as the "Arsinoïte Nome." It was very difficult to determine the exact site of Lake Moeris. It had been supposed that it was what is now known as Birket-el Qoorn, or Lake of the Horn, which is thirty-five miles in length by seven in breadth. But the absurdity of this supposition is shown by the fact that the Lake of the Horn is some hundred and twenty feet below the Nile.—The true site was discovered by Mons. Linant de Bellefonds, chief engineer in Egypt.* He found an ancient dyke in the upper part of the Valley of Fayoom, which he traced through its whole length and discovered the remains of its abutments, sluices, bridges, &c. This immense dam retained the high waters of the Nile which flowed into it; and the ancient Egyptians were thus enabled to irrigate 370,000 acres of land between the Fayoom and Alexandria, where 65,000 acres only are now cultivated. M. Linant, in view of the immense advantages of this work, urged the repairing of it upon Mohammed Ali.

Mr. Gliddon then spoke of the Labyrinths, cautioning his auditors not to confound the Egyptian Labyrinth with three others mentioned in ancient history.† M. Linant also determined its site. It stood upon the borders of

sincère conviction, longtemps après que nous en sommes, à grande peine, détaché pour toujours." ("Représentations Zodiacales," Paris, 1846, pages 5, 6.) (See APPENDIX B.) page 51.

* As far back as November 1839, while exploring the ruins of *Temsah* and the bed of the ancient canal on the Isthmus of Suez, during a medary excursion, my valued Colleague M. LINANT expounded the history of *Lake Moeris*, published by our Egyptian Society in 1843. (LINANT, "Mémoire sur le Lac Mar," translated and republished by Mr. BORRER, London, 1844.) I have never visited the province of El-Fayoom, and am unable to speak from personal examination of the localities; but I cannot agree with Chev. BUNSEN's denial of LINANT's discovery; if inclined to adopt the former's view, that this artificial Lake belongs to the age of *Phisops-Apappu*, MERI-RA PE-PT, founder of the sixth Dynasty: ("Ægypt. Stelle," II., 193, 203, 224 et seq.) LEPSIUS' visit to the Fayoom in June, 1843, has thoroughly confirmed M. LINANT's researches as to the true nature and position of this, the grandest, most philanthropical, and important of all the works which have ennobled the memory of an Egyptian Pharaoh.—G.R.G.

† The etymology of the word *Labyrinth*, like that of *Pyramid*, (ubi supra), which was current in Egypt in the days of Herodotus, is not necessarily of Grecian origin; although KENRICK ("Egypt of Herodotus," London, 1841, page 190—note to *Herod.* II., 148) claims it to be derived from *Λαυρα*, *subterranean passages*, through the form *Λαβρα*, &c. We find in the Texts of Manetho, according to MSS. consulted by CORY ("Ancient Fragments," p. 112.) and BUNSEN ("Egypt's Place," p. 624;) that in the twelfth Dynasty, a King LACHARES, LABARIS, LAMARIS, LAMPARES, and LAMBARES, "built the *Labyrinth* in the Arsinoïte Nome as a *tomb* for himself." Now, in hieroglyphics, as in all primitive

Lake Moeris in the vicinity of the brick Pyramid of Howàra. Dr. Lepsius visited the spot with the Prussian explorers, in June 1843, and discovered an area of 600 feet in length, strewn with columns, entablatures, architraves, &c. He has, by uncovering innumerable chambers with pedestals, partitions and pillars, identified it as the great Labyrinth of 3000 chambers described by Herodotus. A cartouche was found in the Labyrinth, of the same signification as another in the adjoining Pyramid, which proves that they were both built by one King—the Labyrinth for his palace and the Pyramid for his tomb. (BONOMI's Correspondence in *Athenæum* and *Lit. Gazette*, 1843.)

The date of the Labyrinth is uncertain. Lepsius has found in its ruins the oval of TAU-ME-RE (*Rosellini*, No. 96—RE-METAOUO; *Tablet of Abydos*, No. 39), in whom the *Mœris* of the Greeks is easily recognizable: and, according to *Lepsius*, this Monarch built the last of the sixty-nine Pyramids, and reigned about 2154, B.C. This is, therefore, the termination of the Pyramidal period, which ceased when Lower Egypt was overrun by the shepherd hordes.

Mr. Gliddon concluded by answering the objections so often urged against the Pyramids, that they were the monuments of the tyranny and oppression of the Egyptian rulers. It is impossible to condense and do justice to his forcible argument, that a people whose civilization in arts and sciences is attested by the architecture, materials, and hieroglyphical data of the Pyramids themselves, even if forced by despotism to have erected one or two such monuments, would never have endured tyranny, in the modern and European sense of the word, for above *sixty-nine* kingly generations. He showed that Grecian and Roman opinions on the subject, written 2,000 years after the cessation of Pyramidal buildings, were puerile; and that as each of these mausolea was erected *seriatim*, bit by bit, and year by year, by national

Alphabets, the letters M and B were dialectically interchangeable. The final S is the hellenic euphonzier. It is easy therefore to perceive, that a name resembling LABAR is a component element in the word LABYR-*inthos*, λαβυρινθος, handed down to us by the Greeks. Struck with this coincidence, in 1846, I submitted a query to the philological acumen of my learned friend, Prof. LANCI. He kindly gave me the solution which has since been published in his "Lettre à M. PRISSE," page 22: in the course of explaining the attributes of the mortiferous Goddess ANTA, or ANATA, whose name, with the feminine prefix T, is TANATA, cognate with the Grecian θανατος, death. LABYR-INTHE, divided thus into two parts, and expressed in Coptic letters, yields the natural meaning of "*Tomb of Labar*," in accordance with Manethonian tradition. Diodorus Siculus, lib. II., refers to the Labyrinth as the Tomb of *Marros*; in which word, as in the LaMARIS of Manetho, we can still perceive an affinity to the MœRIS of Herodotus and Strabo, to whom was ascribed the Lake on the edge of which the Labyrinth stood: (LINANT, "Mémoire sur le Lac Moeris," pages 8, 17:) all being variations of a name which seem to me reconcilable with the phonetic elements of the cartouche found by LEPSIUS in the Labyrinth. Conferre, however, BUNSEN ("Egypt. Stelle," II., 198, 203, 325); for, as yet, it is uncertain whether the *Lake* and *Labyrinth* are works of the same sovereign, or if the former belong to the sixth, and the erection of the whole of the latter to the *Moers* of the thirteenth Dynasty. The *Pyramid of Howàra* is undoubtedly the tomb of this king, (*Tablet of Abydos*, No. 39,) but like all Egyptian edifices, the *Labyrinth* may have received progressive enlargement during the reigns of several consecutive kings, in many of whose royal names the elements MA-RE frequently occur. These monumental dilemmas await LEPSIUS' solution; but it seems conceded on all hands, that the Labyrinth antedates, and therefore was not, as ROSELLINI and WILKINSON conjectured, the work of *Thotmes-MAIRE* of the eighteenth Dynasty.—G.R.G.

will, and at the expense of the Government, its construction was no drain on the country, either in men or in money. On the contrary, the wisdom of the Egyptian Pontificate became apparent when, independently of an infinitude of other advantages, it was shown that the gross bulk of the labor on the Pyramids must have employed the poorer classes of a vast agricultural population, confined by nature "in immiti solo" on a mere strip of alluvial bounded by barren rocks, when thrown idle every year for three months by the periodical inundation of the river Nile.

The Pyramids, as the sculptures coeval with them attest, were therefore built by the *Egyptians*, and not by foreigners, far less by slaves; which led the lecturer to digress upon the subject of *slavery* among the Egyptians. It is absurd, he said, to cast the charge of enslaving foreign nations, as a reproach upon the Egyptians, when Scripture in all parts of the Old Testament recognizes slavery as perfectly legitimate under the old dispensation. He would not lose himself in endless texts, but were he to enter into the subject, he would begin with the Almighty's covenant with Abraham, in Gen. xvii. 12, 13, where the words of Jehovah to Abraham, "He that is born in thy house, or *bought with money of any stranger*," gave ample sanction to Abraham's purchase of his fellow men. He would also cite the instance of Hagar, Gen. xxi., 10, as an Egyptian bond-woman or slave; and he would go at once to the Hebrew text of Genesis xxiv., 2, and show that Abraham's "eldest servant," as our version has it, is in the original, "Abraham said unto his most aged *slave*." The Hebrew word is here ABeD, which meant a *slave* then, as it does now in the colloquial Arabic of Egypt.

The Text shows that the ancient Jews were allowed to sell each other as *slaves*, ABeD-*hebrè*; their males, (Exodus xxi., 26; Deut. xv., 12-18; Levit. xxv., 39-44, &c.,) for a term of servitude; their women, La-AMuH, to be *mothers*, or as *concubines* (Ex. xxi., 7), for ever.

To the later Hebrews, however, belongs the honor of the first historical renunciation of *slave-holding*. (See *Philo* and *Josephus* on the "Essenes.")

Mr. Gliddon mentioned a curious fact, that although all varieties of the *Negro* race were common in Egypt from the earliest times to the present hour, as captives and slaves, their labor was never applied to agricultural pursuits, but reserved for domestic service. This is accounted for in the circumstance, that Negroes are short-lived in Egypt, and in the abundant poor population of native Egyptians in the valley of the Nile.

The hieroglyphical designation of KeSH, exclusively applied to *African* races as distinct from the Egyptians, has been found by Lepsius as far back as the monuments of the sixth dynasty, before B.C. 3000; but the great influx of Negro and Mulatto races into Egypt as captives, dates from the twelfth dynasty, when, about the twenty-second century, B.C., Pharaoh SESOUR-TASEN extended his conquests up the Nile far into Nigritia. After the eighteenth dynasty, the monuments come down to the third century, A.D., without one single instance, in the Pharaonic or Ptolemaic periods, that *Negro* labor was ever directed to any agricultural or utilitarian object.

We have found it impossible, even with the facilities afforded us by the lecturer of access to his MSS., to present anything like a complete view of the multitudinous subjects interwoven or digressed upon in his discourses on the *Pyramids*—the most ancient and stupendous labors of man on earth—

elucidating the arts and sciences attested by their varied materials of construction; the vast distances from which some of these, such as the *granite*, were brought; nor the simple methods adopted by the Egyptians for the transportation of this ponderous substance from the First Cataract, on rafts, which floated off at the rise of the Nile. Much he spoke also of the simplicity of their mechanical powers in those primitive epochs—of iron and copper implements, the ore of which came from the mines at the Peninsula of Sinai, still exhibiting authentic records of the fourth dynasty; [Cf. LABORDE and LINANT, “l’Arabie Pétrée,” 1830—and LEPSIUS, “Peninsula of Sinai,” 1846; for *plates* and description of these hieroglyphical tablets:] and of the *civilization* deducible from the sculptured walls of tombs clustered around each Pyramid; which mighty sepulchre, in each consecutive age, served as a nucleus for the cemeteries of the nobles, ministers, clergy, and officials of the day.*

Most of these interesting conclusions would be incomprehensible to the reader without the perspicuous diagrams, charts, and tableaux with which Mr. Gliddon elucidates his oral prelections. One position, however, seemed established, viz., that the builder of each Pyramid ruled supreme over the entire country, and therefore that there were no *contemporaneous dynasties* during the Pyramidal period; nor can the long duration, claimed by the

* Among the data, affecting Egyptian *Origines*, handled in this and other lectures, but necessarily omitted in brief Newspaper reports, were the critical investigations of the distinguished Naturalist, Dr. CHARLES PICKERING, into “the introduced plants and animals of Egypt,” &c. Their substance, through his friendship, has long been familiar to me; but they are now printed in his valuable contribution to science, “*The Races of Man, and their Geographical Distribution*,” IX. vol. of the U. S. Exploring Expedition, 1848; a first copy of which, far in advance of publication, I owed to his kindness last June. (Cf. *Ethnol. Journal*, No. IV.) How many species of animals and plants, supposed to have existed anciently in the valley of the Nile, turn out to be modern! The *Camel*, and the *Horse*, are not mentioned on the Monuments of the pyramidal period—the latter, with the first use of *Chariots*, appears only after the twelfth dynasty; and Horses may have been introduced by the *Hykshos*; whose Cavalry, (as when CORTÉZ overthrew the *Montezumas*), was possibly the cause that Egypt was “easily subdued,” and “in a strange manner,” by mounted hordes; (MANETHO; *Joseph. contr. App.* lib I., c. 14, 15.) In after times the expulsion of these barbarian horsemen may have been owing to the invention of the *Chariot* (?). *Camels*, unknown as Egyptian animals on Pharaonic Monuments, appear first on those of Meroë; not earlier, as LEPSIUS’ visit proves, than the second century B.C.; but Mr. BIRCH informs me, that he finds them mentioned in legends of the eighteenth dynasty, existing in *Arabia*; amply corroborated by the Assyrian sculptures exhumed by BOTTA and LAYARD. The universal and exclusive use of *Geese* by the Egyptians is explained by the absence of the common *fowl*, probably till the Persian Invasion. In this long lapse of time some species of animals, such as the *Wavy-horned Ram*, (whose horns surmount the God *Num*—BUNSEN, Pl. 1, fig. 3; better seen in the colored Plates of “*Ammon—Chérubis—arabesque*,” apud CHAMPOLLION, “*Panthéon Egyptien*,” 1823 :) represent the fourth dynasty, became extinct: probably prior to the Restoration, or the fifteenth century B.C. The indigenous *Papyrus*, and the exotic *Lotus*, will be adverted to in the succeeding Lecture on *Mummification*.

Nor does space now allow me to quote paragraphs of my MSS. relative to geological transitions that have taken place in the former elevation of the bed of the Nile; fallen thirty-four feet in Lower Nubia, since the twelfth dynasty or 2200 B.C. (LEPSIUS, “Letter to Dr. MORTON,” *Philæ*, September, 1844, *Proceedings Acad. Nat. Sciences*, Philadelphia, January, 1845;) nor to the depressions and upheavals on the Isthmus of Suez, within historical times; through disregard of which, speculations about the “land of Goshen,” and the “Exode of the Israelites,”

Lecturer for the ante-Abrahamic kings of Egypt, be subverted by an hypothesis favorable to the short chronology, but which the geological, geographical, and physical nature of the land, apart from the monumental *facts* embraced in these lectures on the Pyramids, alone upsets.

We unite in the hope uttered by the lecturer, that "you will no longer look upon the *Pyramids*, as exceptions to the organic laws of human development, or as monstrous vestiges of monarchical tyranny and popular degradation; but will perhaps concede, that had we ourselves been the subjects of H. M. King CHOPRS, we might have cheerfully paid our quota of the assessment requisite for the erection of a triumphal edifice, that, while it perpetuated his memory to the remotest posterity, stamped it with our national dignity, and our country's fame."

"And truly," said Mr. Gliddon, pointing to his fac-simile of the Great Pyramid, "as you cast your eyes on that wondrous edifice of *Shoopho*, you will allow, with the wise Muslim historian, ABD-EL-LATEEF, that 'the form of the Pyramids, and their extreme solidity, are indeed well worthy of admiration; and have enabled them to resist the effects of time for so many ages, that it may almost be considered that it is *Time* (itself) that experiences, and suffers from, the eternal duration of these extraordinary structures; and the more they are considered, the more convincing is the proof, that the most consummate genius and skill were employed in their construction.' And, if you reflect that these hoary monuments have survived the violence of man for above 4,000 years, you will admit the truth of MAKREEZEE's remark (quoted from an older Arab author), 'All things dread the effect of *Time*; but, over the *Pyramids* Time has no power,'—for, 'Leur masse indestructible a fatigué le temps;' their indestructible masses have *fatigued* the hand of time!"
Lowell Institute Course—(BOSTON EVENING TRANSCRIPT, 23 Nov., 1843.)

hitherto present a chaos of topographical anachronisms. These themes, together with the progressive development of the denizens of the Nile in geographical and historical knowledge; the alternate changes of dogma, which made that *pictorial* chronology a theory heresy in one age, which was orthodox at a preceding epoch; the gradual alterations in language and *ergo* in writings; and the progressive extension of the *alphabetic* principle, from fifteen articulations at the fourth dynasty, to thirty-one in Coptic times, or the Christian era; these themes, I repeat, have formed incidental digressions in my oral lectures; and are elementary conditions so essential to the *time-measurer*, that, without their due consideration, his *arithmetical* chronology, in Egyptian matters, is "vox, et præterea nihil."—G.R.G.

APPENDIX B.

The peruser of Mr. BURKE's masterly and quite novel "Analysis of the Hebrew Chronology, in the *Ethnological Journal*, Nos. I., II., VI., requires no further arguments to perceive the spuriousness of ante-Solomonic Hebrew numerals, although others can be adduced of a different nature equally annihilating, as I hope in time to demonstrate. The patriarchal generations of the "Hebrew Verity" have been stricken a blow, from which, like PAULUS' *naturalistic* explanations of miracles under the iron mace of STRAUSS, they can never recover. But the *Septuagint* chronology received its "coup de grace" from the acute criticism of an eminent Egyptologist, who has exposed the artifice of the hellenistic Jews of Alexandria, when they tacked on an Egyptian *Sothic Period*, 1,460 years, to the previous numbers of the Hebrew Text! (SHARPE, "History of Egypt, London, 1846, pages 195, 196.) It affords me the more pleasure to acknowledge the erudite labors of this gentleman, as I fear we differ in some few hieroglyphical technicalities.—G.R.G.

THREE DISCOURSES ON THE ART OF MUMMIFICATION AMONG THE EGYPTIANS :

ITS ORIGIN, NATURE, AND DEVELOPMENT.

BY GEORGE R. GLIDDON, ESQ.

LECTURE VI.

THE magnificent tableaux that adorned the hall in the preceding lectures had been shifted, so as to present a new and beautiful background, exhibiting, pictorially, varieties of Sarcophagi, Mummy Cases, &c., from the Coffin-lid of King *Menkare*, builder of the third Pyramid above 5,000 years ago, down to the marble trough that once held the body of Pharaoh *Amyrtæus*, twenty-eighth dyn., B.C. 400—both monuments now in the British Museum; and other funereal antiquities, comprising sycamore coffins, human skulls, feet and hands of ancient Egyptians—papyri, tablets, and paintings from the tombs, showing the art of embalment in many of its forms.* On the tables

* The reader will indulgently bear in mind that in this and the two succeeding lectures, were interspersed an infinitude of oral digressions, and specific references to the *Illustrations* and *Antiquities*, which, without the latter, would be unintelligible; as well as extend into a bulky volume that which is at best but a synopsis of a few pages. They are consequently omitted in this digest of newspaper *Reports*. I have had but one complete *Mummy* in its Case, and one *painted coffin*, wherewith to elucidate this theme in the United States: where, excepting the choice but small cabinet of Egyptian Antiquities belonging to my esteemed friend, the Oriental traveller, Col. M. J. COHEN, of Baltimore, and the immense gallery of *Crania*, appertaining to the founder of Ethnology in America, Dr. S. GEO. MORTON of Philadelphia, there is nothing entitled to the name of an *Egyptian collection*. Here and there a few trifles, chiefly sent by myself in former times from Cairo, exist at Boston, New York, Brooklyn, and Washington. The human Mummy above referred to, (obligingly lent me by its proprietor, Mr. JOHN L. HODGE, of the Academy of Natural Sciences at Philadelphia,) by the legends on the case, is the Osirified body of the "divine Priest of *Hor-Amun*, Priest of *Amunhi* (Thebes), PET-ISI (He who belongs to Isis) deceased . . . son of the germ of *Penipya*?—whose Mother was *Taia*, lady of the temple and singer? of *Pasht*." &c. From the style of the hieroglyphics, the multiplicity of Deities represented on its sycamore coffin, the *bitumen* which has completely blackened one of the tallest Egyptian bodies I have ever seen, and the insertion of *Obsidian* and glass eyes, I should not deem its age anterior to the PSAMETTICI, say the seventh century, B.C. The other coffin, which with all the funereal ceremonies and animal mummies in my possession I owe to the friendship of my honored collector, Mr. A. C. HARRIS of Alexandria, comes from the prevalence of *yellow*: . . . its background, &c., . . . more recent date. It once held the corpse of the "Osirian, Priest and Scribe of Thebes, AMN-M-OPH."

For all cognate information on Mummies, aside from the voluminous works and papers of the Hierologists, among whom the "*Egypte Ancienne*" of CHAMPOLLION-

lay *animal* mummies; hawks, owls, ibises, cats, jackals, serpents, fishes, the sacred ram of ancient Thebes, and the far more venerable remains of the holy calf, who, if untimely death had not cut short his career, would have been *Apis* the *bovine* god of Memphis. Crocodiles embalmed from the very egg, up to all sizes, prove the ingenuity of the ancient Egyptian priests, who made it an act of piety to catch and mummify such reptiles, to get rid of them! Linen cloth of all textures—some very beautiful in fabric, from the tombs—glass beads, bugles, and enamelled porcelain idols, prove that *glass* was known in Egypt 2,000 years before the Plinian fable of its invention by the Phœnicians. Copper mirrors, ancient leather and papyrus shoes, pottery, vases, ancient fruits, &c. These are some of the rarities all have heard of, though few in America have seen, elucidating each point of the lecturer's remarks, which we now proceed to condense. "We conceive, (observes the *Mobile Tribune*,) the great charm of Mr. Gliddon's Lectures to be the successful manner in which he clears away the rubbish which has accumulated around Egyptian antiquities, and renders each fact perspicuous and intelligible to his hearers. There is no humbug,—no mystification. Every thing is plain and comprehensible."

Mr. Gliddon commenced by stating that the art of mummification (from the new French term *momification*,) antedates all history—its existence is coeval with the earliest Pyramids—now, thanks to Lepsius, dating with the third dynasty, before the thirty-fourth century, B.C.!

"An Institution, that in the unknown date of its first origin antecedes all monumental and historic chronology; that was at once political and religious in its forms, no less than practically utilitarian in its objects; that was so interwoven with the mental, moral, and physical relations of the Egyptian to the 'dark land' of his sacred river, and entwined with his doctrinal belief in the resurrection of the *body* to bliss or suffering in the mystic perpetuity of *AMENHI*, or *Future State*—cannot well present itself through discourses of a few hours, in a clear and classified order to the mind whether of the speaker or his auditors—after that transfer to another Hemisphere, the *New* world, six thousand miles from the Nile, undreamt of by Pharaonic geographers; the medium of a distinct language, the *English*, non-existent when the *last* Mummy was made; the total change in race of man, from the ancient attributes of a *Hamitic* Egyptian, to the modern characteristics of an *American* Japethic Anglo-Saxon—the transitions that have taken place through time and circumstance, and the consecutive metamorphoses in political as well as in religious creeds—combine to obscure our conceptions in encountering a subject that, apart from every other obstacle, is veiled from our *nearest* view by the lapse of fifteen centuries." On these grounds the lecturer solicited the indulgence of his hearers.

The derivation of the word *Mummy* is from the *Moomia* of the Arabs—the

FIGEAC, and the "Manners and Customs" of Sir J. G. WILKINSON, are the most accessible authorities, the reader is referred to that admirable compendium, PETTIGREW, "History of Egyptian Mummies," London, 1834; to GANNAL, "History of Embalming," Paris, 1838—Dr. Harlan's translation, Philadelphia, 1840; and to MORTON, "Crania Ægyptiaca," Philadelphia, 1844.

root of which is *Moom*, bitumen, also meaning *wax*, the substance which, in latter Pharaonic days, preserved the bodies from decay. We obtain the word *mummy* from the returning Crusaders; for St. Augustine, in the fifth century, A.D., calls the bodies so embalmed *Gabbaras*.* Even our word *coffin* is of Oriental origin, from the Arabic term *keffen*, to enclose in a winding sheet.

This premised, the Lecturer went on to describe, by means of *geological sections*, the four features of Egypt—rock, sand, water, and alluvium—how the action of the inundation drove sepulture first to the *sand*, and afterwards to the *rock*, so soon as man had reached the possession of metal tools, wherewith to make an excavation. In this process, Mr. Gliddon opened *new views*, *new methods* of reaching some of the events which antedate all human monuments now extant; touched upon geological transitions; showed how the alluvium of the Nile has been deposited annually upon the limestone, for more than 7,000 years, (See *Appendix D.*); and maintained that there is not the slightest reason why the primitive Asiatic Nomad, who migrated into the “*dark land*” of Egypt, and hence derived the name of *Kham*, should not have done so at that remote age, which is anterior to all human chronology.

The features of the surface of Egypt, admirably explained by Mr. Gliddon’s colored diagrams, are rock, sand, alluvium, and river. The country itself consists of a long and narrow strip of alluvium, with the Nile in its midst, and bounded on each side by barren rocky ridges. There is little rain, and the only potable water is from the periodical inundation. This becomes more brackish as it recedes from the river, owing to the saline ingredients it dissolves out of the soil. The alluvium which, in consequence of the deposit

* GABBARA, from the Semitic root GuBR, to inclose in a *solid envelope*, according to CAMILLE DUTEIL: (see his otherwise absurd “*Dictionnaire des Hiéroglyphes*, Bordeaux, 1839.) KIRCHER, (“*Œdipus Ægyptiacus*,” Rome, 1658; Tom. II., pars 2; p. 396,) on the etymology of the term *Mummy*, remarks, “*MUMEE vox Persica est, et idem notat, quod exsiccatum cadaver certâ ratione conditum, corruptionis expers;*” but PETTIGREW (p. 1,) with more propriety traces it directly to the Persian name of bitumen, *MUMIA*, or mineral pitch, abundant in trans-Euphratic provinces. The Greeks, in speaking of Nilotic embalming, make use of a distinct appellation in the various forms of the verb *ρᾱτίζειν*, to salt, or pickle; from the saline ingredients, *Natron* especially, employed in the manufacture. The Hebrew Text, (Gen. l., 5 to 20,) where allusion is made to the embalment of JACOB, has *HaNaT*, to prepare dead bodies. In Coptic MSS. Mummies are called *Miolon*; and also *Kôs*, from *Kos* a sepulchre, or the verb *Köse* “*curare cadaver;*” (PARTHEY, “*Vocabularium Coptico-Latinum*,” Berlin, 1844; in loc. et sub voce *Mumia*.) In Hieroglyphics, a Mummy when written *figuratively*, or as a determinative, is expressed by the image of the thing itself, a *Mummy reclining*; with or without a beard, to designate its masculine or feminine gender; its vocal synonyme being *CHA-T*, or *SHA-T*; Copticè *SHAAT*. There are many other names extant in the sacred tongue, some of which are preserved in Coptic, for, to *embalm*, *biers*, *SOLS*, *KLOS*, *KARS*, &c.; but as it is impossible without a conventional system to transcribe their sound in European alphabets, and without hieroglyphical and coptic type, it is sufficient to refer to CHAMPOLLION’S *Grammar* and *Dictionary*, or to BUNSEN, (“*Egypt’s Place*,” I., p. 541, 571.) Enough has been said to show that no form of the word *Mummy* seems to antedate the Saracenic conquest of Egypt by *AAMER* in 638, A.D.; and that we are indebted for it, no less than for hundreds of Oriental names current in our modern tongue, to the Arabs.

of mud that takes place in its bed, is higher at the river's banks (like our *American Nile*, the Mississippi,) than further inland, is exceedingly fertile, and must have been anciently, as now-a-days, immensely valuable when crowded with a population of from five to eight millions of souls. There was a necessity for preserving it carefully for agricultural purposes, especially when commerce did not give the means of supply in case of scarcity. It is not used for burials at this day, except on the sites of the old cities, elevated a few feet above the inundation. The ancients never used it for sepulchral purposes, and hence they had no choice but the rock or the narrow strip of sand that intervenes between the hills and the alluvium. In the earliest age the ante-monumental Egyptians probably buried in the sand, because they had not the tools necessary to excavate the rock. This sand was a precarious position for dead bodies when wolves, foxes, and jackals were so abundant. The crocodiles, especially, would disinter them whenever the inundation brought those reptiles to the edge of the desert. There was also danger that a high Nile would saturate the graves. During this time the metals were coming into use, especially copper from Mount Sinai. The saw for cutting stone came into use in the second dynasty. The inconveniences of sand-burial would therefore soon lead the population to look to the rock for sepulchres.

The *Sand* was the primitive ante-monumental burial-place, because the alluvial soil, then less by many thousand inundations than at this day, was too precious for agricultural purposes; but the sand was too precarious a position to be used as soon as civilization had advanced sufficiently to enable man to cut the rock. Hence the burial of the dead was carried to the hills, that bound the narrow valley. The Western hills were selected, because the largest breadth of the alluvium was on that side, and therefore the largest cities, whose cemeteries, Thebes, Abydos, Memphis, Pyramids, &c., for convenience sake were to them contiguous. But there was also a doctrinal reason why the *West* was selected. It is the Occident, the dark region of the setting sun, known to the Greeks as *Erebus*. The root of *EREBUS*, is the Semitic word *EREB*, the *West*; mentioned in Gen. i., 5, &c.; the same radical whence the name *Arabs*, literally the "men of the *West*."

[From the same root proceeds the Arabian name of *MoGhReB*, applied to *Barbāry*, as the *Western* land; occupied at this day, as anciently, by the *Berber* tribes, whose present Nubian designation of *Berābera* is at least as old as *MENEPHTHA I.*, of the eighteenth dyn., in the sixteenth century, B.C., when it occurs hieroglyphically in the name orthographed *BRBR*, or *BARABARA*. The *Berbers* of Northern Africa, whose traditions are Canaanitish, and whose barbarous habits originated the European appellative *Barbarian* applied by the Greeks to all nations but themselves, possess a language closely allied to Hamitico-Semitic dialects. Their name may be resolved into *Pi the, EREB West*, and *BAR Son*, (or *BER, Arabic Country*), thus yielding again *B-EREB-BAR, the Sons of the West*.]*

The *West* was called *EMENT* by the Egyptians, who therefore termed

* This etymology of the word *Berber* will appear as speculative and objectionable to many able judges, as it is novel to all. Its justification involves an argument that, although prepared, is too lengthy to be inserted in the form of a note

the *future state* of the dead AMENTHI; corresponding to the Homeric idea of Ερεβος, a region of darkness intermediate between the earth and Hades; and to the Hebrew שְׁעוֹל, *Orcus*, of which our English word *hell* is an erroneous translation, no less than a mythological anachronism.

Thus the West, the Occident, region of the tenebrous *unknown* future state, was in universal mythology consecrated to the dead; because the *Sun*, primeval divinity of all nations, sets there, leaving the world in obscurity: and in Egypt the bodies of the early dead were mostly interred in the Western hills, while their souls followed the shades of *evening*, EREB, to *Amenthi*. It is from this primitive cause that Oriental nations still bury East and West, although each at the present day relates a different doctrinal fable for the custom.

Mr. Gliddon next proceeded to the investigation of the sepulchral architecture of the Egyptians; prefacing this part of the subject (we quote the *Southern Patriot*, Charleston, 17th Nov., 1847,) with some very impressive remarks on the philosophy of National Architecture in general. To the eye of the archæologist every nation's architecture possesses peculiar characteristics, whereby the student can trace national origins, and elicit much of a given people's ante-history, from the several styles of their monuments. As the grammatical construction of a given language enables the philologist to deduce, not only the pristine geographical habitat and ethnological affiliations of the nations that speak it, but also what foreign admixture it has received, what phases such people has undergone in its early migrations, so it is becoming hourly more facile, as science progresses, and the "comparative anatomy," so to say, of architecture is accessible through more exact copies of monuments, to evolve much of the lost history of early humanity from the several styles of their structural remains.

Thus, for instance, the *Pagoda*-forms of the now-stationary Chinaman still point back to the remote age, when *felted tents* were the abodes of his nomadic ancestry. The *tent-like* roofs of the modern Turk, that give such a picturesque effect to Ottoman cities, tell of Tartarian encampments in Central Asia; and, by connecting him with the Chinese, enable us to deduce his primitive origin from their vicinity, even if his language, his habits, his migrations, his own as well as Chinese history, despite the changes which, through amalgamation with races of higher caste, four centuries in Europe have effected in his *physique*, did not narrate the same story.

We Anglo-Saxons seem to cling, through our favorite architecture, to a vague remembrance of the lofty forests of ancient Germany, where our hardy ancestors so long halted in their circuitous march from Central Asia; and,

in this No. of the *Journal*. Craving the indulgence of the reader, I will endeavor to introduce its defence, together with some new comparisons between ancient names of Caucasian and African races preserved in *hieroglyphical* geography, and those extant in Arabic literature and on modern maps, that will be found curious. These coincidences have been submitted verbally to the examination of a master in archaic philology, Mr. SAMUEL BIRCH of the British Museum, who is preparing a memoir on co-relative questions; and I have no doubt that their publication will open a fertile, if yet unbroken field of research to fellow-laborers.—G.R.G.

like the Goths, we still love to behold in stone the columnar forms of Northern trees ; and even now make the ceilings of ecclesiastical buildings in resemblance of the interlocked boughs of shady groves, under which our Druidical progenitors offered their simple sacrifices.

The Spaniards still revere the architecture of the *Saracen* they expelled ; and El-Hamra, Cordova, Grenada, with their derivative monuments of Catholicity in America, even yet record the sojourn of the Muslim in the Hispanian peninsula ; who there epitomized the traditions of his own anterior life in Arabian deserts : for, essentially a Southern people, occupying a land where, in the absence of the dense foliage of Northern latitudes, man seeks shelter from the sun amid the shadows of fire-denuded rocks, the Arabs, quickened to exertion by the promethean spark of Mohammed, shaped their *pillars* like the palm trees of their petrean wilderness, and in the interior of their vaulted domes and cupolas strove to perpetuate, sculpturally, the remembrance of the sharp and drooping points of the stalactite caverns of Arabian mountains.

This sketch of the principles adopted by archæologists in evolving fragments of the natural history of man through the " comparative anatomy " of monuments, when applied to very modern nations, such as the United States, proves their diversified origins through the architectural intermixture of different national styles : but on applying the same criterion to the Pharaonic monuments of the *Nile*, we encounter one united mass of architecture, preserving throughout, whether in its Pyramids, its Temples, and its Tombs, or in its Sculptures, Paintings, or Hieroglyphical Writings—from its almost superhuman scale of gigantic effort, down to the humblest detail of its minor attributes—one and the same all-pervading system : and this system no imitation of the architecture of any other people on earth, but self-begotten, self-developed, and self-fallen : never, from its earliest infantine cradle attainable by inference, down to its last effort of expiring decrepitude, during a monumental period of above 3000 years, having adopted foreign ideas, or tolerated any alien interference. Other and later nations have appropriated, in divers degrees, the architecture of the " Land of KHEM ;" but the *Egyptian* copied no one—he thought and acted for himself.

In tracing, therefore, each feature of Nilotic architecture to its birth, we must seek in *Egypt itself*, its soil, climate, geological constitution, and natural productions, for the solution of our queries.

After a rapid glance at the exploded fallacies of GAU and others who, mistaking the latest for the earliest monuments, (substituting Roman abortions for pristine Pharaonic commencements, &c.,) traced the progress of architecture from Ethiopia downwards, the Lecturer explained the origin and nature of Egyptian *columnar* architecture, pointing out on his illustrations abundant examples in support of his assertions.

Egyptian columns generally represent various combinations of the vertical stalks of plants, tied together by horizontal bands at regular intervals, and terminating in a capital formed by the leaves, flowers, petals, buds, and other parts of the papyrus, intermixed with each other, (sometimes with the *Lotus* ?) and often accompanied by branches of the palm. The architrave never rests upon the flowers of the capital, as in Grecian columns, but upon a square abacus ; looking as though the column consisted of a central square beam or

shaft, the stalks and flowers being subsequently added, and lashed round by way of ornament. He showed how the vegetable ornaments on *Greek* monuments are of Hellenic origin, Acanthus, &c.: just as the ornaments on the two pillars, *Jachin* and *Boaz*, were lilies and pomgranates, plants indigenous to Palestine:—(See LANG on I. Kings vii., 17 @ 21). He proved that the Egyptian columnar forms are taken from the *Papyrus* and *Palm Tree*, which plants in primordial times had served the wandering shepherds, who settled in Lower Egypt, for their first food, and had been the materials for their primitive *shanties*, the remembrance of which was epitomized when their descendants made those plants sacred to the Gods in their architecture. *Ergo*, this is purely of Nilotic origin.

In Egypt we find only plants peculiar to the *Nile* represented in primitive architecture, as the papyrus and palm; and these were painted in appropriate colors. There can be no doubt, therefore, that Egyptian architecture was autochthonous, and we need not look elsewhere than to the valley of the Nile for its adoption.

* The *Cyperus Papyrus* of Linnæus, at the earliest age, prior to the introduction of the Cereals, the “primeval aliment” of the Egyptians; during the monumental period, in the form of *paper* the main spring of their civilization; whose flowers and leaves surmount, while its stem in polymorphous combinations was the type of Nilotic columnar architecture, in whole or in part; at once a symbol of *Lower Egypt* where it grew, and of the *North*; and the cultivation of which, in Roman times, was a monopoly jealously appropriated by the conquerors seems to be extinct, now-a-days, in the Valley of the Nile; although, under the name of *Berd*, its existence is mentioned by recent Arab historians. The plant itself is represented on the monuments of the Old Empire; but PICKERING (“The Races of Man,” 1848, page 368,) ascribes to it a foreign origin. In common with PRISSE (Miscel. *Ægypt*, p. 39,) in the course of wanderings on the marshy shores of Lakes Bourlos and Menzaleh, I have frequently inquired for the Papyrus without success; nor do I remember to have met with any competent judge who had seen a living specimen within this quarter of a century in Egypt. It is the *Papyrus* which is beheld sculptured and painted on Egyptian capitals: (see all varieties of form in the “Description de l’Égypte;” A, Tom. I., Plates 75 to 78.)

I am unaware that any naturalist but Dr. PICKERING, a very high authority, has hitherto deemed the *Date Palm* to be of exotic origin: (*Ibid*, page 371.) He considers that it was “a most important novelty, introduced about the age of the twelfth dynasty; yet I have found its *branches* and *matting* in the stone sarcophagi of the humble quarry-men of Toorah, whose epoch would seem to belong to the pyramidal period: (Cf. MERTON, “Crania *Ægyptiaca*,” page 9.)

It is interesting with botany compels me to observe extreme diffidence on the part of some writers, who, under the names of *Faba Ægyptiaca*, *Nymphaea Nelumbo*, *Nelumbium*, *Nymphaea cerulea*, *Nymphaea Lotus*, &c., is so frequently mentioned by writers on Egypt. It strikes me, however, that great confusion arises from indistinctness of nomenclature; some authors meaning one species of water *Lily*, some another. The *monumental Lotus* (colored blue, green, and red,) symbol of *Upper Egypt*, and of the *South*, is figured in legends of every epoch; but it does not appear to be a component element in the “bell-formed Capitals” of Temple-architecture: (WILKINSON, “Topog. of Thebes,” p. 54.)

If by the term “Sacred Lotus” be meant the *Nelumbium* of Hindostan, that plant (if really known to the Pharaonic Egyptians?) was indisputably of foreign origin; (PICKERING, pages 350, 368, 385:) and the only specimen I have ever seen in Egypt was pointed out to me in Ibraheem Pasha’s garden, at the Island of Rhoda, by a master in Egyptian botany, my oldest companion at Cairo, Mr. JAMES TRAIL, as a plant introduced from India after 1835, and non-existent elsewhere in the valley of the Nile; although another accurate observer, Mr. E. W. LANE, has

To account for the use of those plants in columnar ornaments, we are to look to the history of the first Asiatic shepherds who reached the banks of the Nile. Here they found but few trees of any magnitude, such as the thorny acacia and the date palm, and a profusion of water plants. Their vegetable nutriment was furnished in abundance by the papyrus root, the date, and a few other fruits. The first, as supplying these nomadic tribes with their primitive aliment, became sacred to them. The papyrus also gave them the material for clothing, baskets, mats, ropes, sandals, and boats. (Isaiah xviii., 1, 2.) The papyrus was, in fact, the first element of Egyptian civilization; as in after times it became the main one, when its stalks, converted into *paper*, produced upon the ancient world effects similar to those which *magnetic telegraphs* are going to do among *ourselves*; and yet this plant, which was once the principal food of the Egyptians, is no more to be found in the valley of the Nile. The date palm still feeds the population of Egypt for two months of every year, while its trunk furnishes the longest timber, and its branches, leaves, and bark answer an infinitude of purposes. These plants also furnished to the Egyptians, in their age of nomadism, the earliest habitations. The stalks of the papyrus and the slender branches of the palm, bound together by withes of the same substance, formed columns. Between these the pliant stalks of the papyrus were interwoven, palm branches served as rafters, the leaves furnished thatch, and a coating of Nile-mud rendered the transient edifice secure from the weather. Such a *shanty* is made by every Nubian at this day. These habitations would be abandoned without a sigh, for others reared quite as easily, as soon as the cattle had eaten off the forage or man had exhausted the natural resources of the vicinity. When the Egyptian, in his monumental phase, abandoned these vegetable dwellings for permanent brick or stone cities, he perpetuated the memory of his pastoral condition in the architectural embellishments of his new habitations; in memento of that plant which Herodotus (II., 92), and Horus-Apollo (I., 30), term "the primitive *nutriment* of man"—"the first *origin* of things."

The papyrus and palm branches which form an Egyptian capital are then

since told me that it is still grown in the garden called Birket-er-Ruttle, outside the Bâb es-Shaeréeyeh at Cairo.

If, which seems to me less liable to historical objections, the *monumental Lotus* of the hieroglyphics be merely a select variety of the beautiful *Water Lilies* that in such profusion float on the surface of the lacustrine vicinities of Rosetta and Damietta, then that plant was indigenous from the earliest times to this day; when the Fellâh's proverb, "*Ketèr el-Bashnèyn, ketèr en-Nèl*,"—abundant the *Lotuse*, abundant the Nile—is a joyful prognostic of a copious inundation.

The fruit of the *Lotus* eulogized by Homer, and the one which formed the subsistence of the semi-fabulous *Lotophagi*, is that of the Lote-Tree, Zizyphus, Rhamnus, or Jujube, which under its Arab appellative, "*Mukhèyt*," is still the clammy food of the inhabitants of Egypt and adjacent provinces.

In pointing out to my audiences the exquisite taste exhibited by the Egyptians in the multifarious combinations of their capitals and pillars, I have made use of the superb colored plates of "*Panorama de l'Égypte et de la Nubie*," Paris, 1844-7, by my friend M. HOREAU. The "*Sketches of Egypt and Nubia*," now in course of publication, which in artistic beauty exceed everything heretofore accessible, will enable me to embellish my American gallery with Mr. DAVID ROBERTS' magnificent tableaux.—G. R. G.

but the record of an *earlier* period, when these plants, bound together in their natural state and surmounted by their flowers or leaves, were important pieces in the primitive habitations.

Without the *papyrus*, said the lecturer, Egypt could not have been the primary school of infantine man—and if *Egypt* be deducted from the world's primeval history, what remains?

Through this method we reached that long, but chronologically undefinable, period between the formation of the *Nile's alluvial deposit* (prior to which Egypt was uninhabitable by man,) and the erection of the earliest *Pyramid*; the existence of which attests anterior ages occupied in progressive steps towards civilization. *Chronology* is set at naught in the contemplation of its antiquity. Mr. Gliddon designates this blank of time by the term *ante-monumental*.

By the same inductive argument, we arrived at those remote days when the *Rock* had not yet been excavated for *Tombs*; and therefore when *Mummies* had not yet been manufactured in Egypt, the land of *Mummies*; and when the Egyptian buried his dead in the sandy space which bounds the alluvium.

In still earlier times it is probable that little attention was paid to the dead, but bodies were abandoned, as was the case in *China* in parallel ages, long prior to B.C. 3,400; (see PAUTHIER, "*Chine Ancienne*," and the *Chou-king*.) But a natural feeling would soon suggest the propriety of hiding the corpse of a once-loved friend underground, and with rude materials a grave would be scratched in the alluvium. This becoming too valuable as population increased, and being besides subject to inundation, the sand was next chosen as a place of inhumation. The danger from wild beasts, &c., rendering this objectionable, recourse was finally had to excavation in the rock.

The lecturer digressed from his theme to show how the antiseptic and hardening qualities of these saline ingredients were known to the Egyptians, from their presence in the *mummies*. Herodotus, and other ancient authorities, mention *Natrum* as the main condiment of the embalmers; the body being probably steeped for many days in a bath containing a strong solution of this salt. The *dryness* of the climate of Upper Egypt is so remarkable, that Mr. Gliddon has seen the meat harden without putrifying, from solar action alone. *Ovens* for baking the bodies of the dead appear indispensable to the process of mummification, and there is some proof they were used for the desiccation of human corpses; all mummies having been thoroughly *dried*.

It is from this *Sand* burial that mummification takes its natural rise. The sand of Egypt is impregnated with salts, *natron*, *nitre*, *common salt*, and *alum*, which destroy the oleaginous and lymphatic matter of bodies.* The

* After 1,000 years of experiments to ascertain the simplest chemical ingredients for the surgical preservation of human carcases, Parisian science has returned to those which, in Egypt, are inherent in the *Sands* of the desert—"an aqueous solution of three salts—*nitre*, *common salt*, and *alum*."—(GANNAL, page 219.) The rationalism of mummification, and its origin in *Sand*-burial, seem to have first suggested themselves to MAILLET; (see his "*Description de l'Égypte*," by the Abbé LE MASQUIER, Paris, 1735, pa. 261, &c.,) but the reader is especially referred to GANNAL, page 86 to 88.—G.R.G.

Sun's rays supplied the baking process of desiccation; and here we have the simple origin of primitive mummies, of which *Nature* was the first suggestive. The primordial Egyptians, therefore, found the bodies of their departed friends preserved and mummified by a natural process, and they consoled themselves for the death of those dear to them by seeing their forms thus remaining unaltered. When, after ages of experience and self-tuition, they abandoned interment in the sand and began to bury in tombs excavated in the rock, the difficulty presented itself that this desiccation and preservation no longer continued to take place: with a little thought, however, they soon discovered the cause of the natural process to lie in the salts contained in the sand, combined with its drying and baking properties. Natron drawn from the lakes offered a substitute for one, and artificial ovens for the other. In proof of this it is known, said Mr. Gliddon, that the earliest mummies were prepared simply by Natron, desiccation and wrapping in woollen cloths, without the use of bitumen, or any of the costlier materials subsequently employed in the process of mummification.

Art, in progressing civilization, improved upon the same principles, until the conquest of Assyria, during the eighteenth dynasty, B.C. 1,600, by making bituminous countries accessible to the Egyptians, introduced *bitumen*, with which all later mummies are embalmed.

"Such is an outline of this instructive lecture, although it is impossible, within the brief limits to which we are confined, to do anything like justice to its ample and interesting details:"—(*St. Louis New Era*, May 4, 1848.)

APPENDIX D.

Seven thousand years.—I have adopted in this instance, without therefore accepting all of this learned writer's hypotheses, and merely as a conjectural *minimum*, the ingenious calculation of my respected friend M. HENRY, ("L'Egypte Pharaonique," 1846,) whose work, with those of several continental Authorities on Egypt not on the catalogue of the British Museum Library, being now with my books and lecturing-apparatus in America, the reader will excuse my inability to cite on every occasion volume and page. To comprehend the principles that warrant an assertion in appearance, at first blush, so hazardous, while he will find at foot specific references for other data on which my argument rests, the reader will obligingly turn to pages 39-40 of my "Chapters on the History," where a rough skeleton map, and explanations, will afford him an idea of the physical peculiarities of a *river-land*, in its nature unique, and unlike the superficial aspect of any other region of the habitable globe.

This rude outline of a chart, wherein Egypt is reversed from the usual order of hydrographical accuracy (i.e. *turned upside down*; the Mediterranean being placed at the bottom of the page instead of the top); is the reduced copy of a large *colored Map*—eight feet by four—always suspended in my transatlantic Lecture-rooms, which is designed to afford its beholder such a view of the Valley of the Nile, as would be presented to his eye, were he borne in a balloon by the Etesian winds up the Nile, from the sea to Nigritia, at such an aerial elevation that small objects would be indistinct. In its preparation I was guided by the requirements of lectureship; inasmuch as it seems more natural to an occidental auditor, on commencing an imaginary voyage towards Egypt from the New World, that Palestine should lie on his *left*, and Barbary on his *right* hand, exactly as these countries bear from the fore-castle of the ship which carries him to Alexandria; while, on the part of the lecturer, compelled incessantly to indicate with a wand

the relative position of Monuments situated along the Nile, it would appear paradoxical were he to point *downwards* on ascending the River, or *vice versa*, as he would be required to do on the ordinary arrangement. Six years of practical experience have, moreover, confirmed the expediency of this arbitrary derivation from hydrographic usage.

On this original Map the *colors* of the four characteristic features of Egypt are presented—the Nile in *blue*; the alluvium in *green*; the slight intervals of sand in *pale yellow*; and the barren ridges of the “Hâgar” (Arabic—*stone*; the modern name of the rocky and sterile table-land which, from the latitude of Cairo upwards, bounds either side of the Valley,) in shades of *brown*. A glance at this chart conveys to the mind of a spectator, accustomed to the forest-clad hills of the United States, more than a volume of explanation. Personal acquaintance with Egypt, from Pelusium to the Arab’s Tower, as well as from Suez on the Eastern, to the Natron Lakes of the Western deserts, renders it scarcely necessary that one, to whom for twenty-three years from childhood to manhood the “Land of Mizraim” was a cherished abode, should supply corroborative reasons for probable accuracy of judgment in such simple details; but having enjoyed the advantage of the frequent inspection of my friend M. LINANT’S (now LINANT-Bey, “Inspecteur en Chef des Ponts et Chaussées,” in the Vice-Roy’s service,) *Maps, Plans, Drawings, Surveys, &c.*, of all parts of the country, and possessing several autograph charts, &c. (see *Appendix E.*) of his own in *colors*, I have felt pleasure in availing myself of their assistance.*

* *Bibliography*.—“Description de l’Egypte,” ed. PANCOUCKE; *Atlas Géographique*, particularly File. II., for the aspect of the hills and deserts on either side of the Nile:—A. Tome V., pl. 19, fig. 3; “Profil de la Vallée du Nil à la hauteur des Pyramides:”—E.M. Tome I., pl. 6, fig. 29, 30; “Profils de la Vallée:” and pl. 11, fig. 1 to 4; “Plan du port de Souéys.” *IBID.* *Traité, Histoire Naturelle*, Tome XX., pages 77 to 132;—GIRARD, “Observations sur la Vallée de l’Egypte et sur l’échauffement séculaire du sol qui la recouvre;” with especial reference to the *Plate*, page 33, for the *depths* of the *alluvium*, ascertained, in 1799, by sinking shafts along a transverse section of the Valley at the parallel of E’Siout. HEMPRICH and EHRENBURG, “*Naturalgeschichtliche Reisen*,” Berlin, 1828; vol. I., page 124, *Plate*, “Abfall der Libyschen Hochebene gegen die Ammons Oase eine geognostische skizze;” and page 162, for an excellent geological chart of the Libyan desert, with profiles of the Mountains on either side of the Red Sea. LABORDE and LINANT, “*Voyage de l’Arabie Pétrée*,” Paris, 1830; Plate 3, “Vues Topographiques,” and Plate 69, *Map*, for the mountainous region around the Elanitic Gulf. Also LINANT, “*Mémoire sur les Forêts Petrifiées*,” Soc. Géog. 1839: *IBID.* “*Mémoire sur le Lac Meëris*,” Egyptian Soc., 1843: for localities on both sides of the Nile. RUPPEL, “*Reise in Abyssinien*,” 1838; vol. I., § 4, “*Excursion in Pétraïschen Arabien*,” and II., page 441, “*Höhenbestimmungen*.” I have not seen, his “*Reise nach Arabien*,” 1829. WILKINSON, “*Topography of Thebes*,” 1835, pages 40, 314, 340. *IBID.* “*Manners and Customs*,” 1837, vol. I., pages 5 to 11; 1841, vol. IV., pages 106 to 121; and particularly vol. IV., plate 18, “*Sections of the levels of Egypt*.” *IBID.* “*Mod. Egypt and Thebes*,” 1843; vol. II., pages 164 and 354. WILKINSON’S great *Map of Egypt* is yet unpublished. I possess likewise a MS. copy of his *colored map of the Fayoom*, made for me at Cairo in 1832, by our amiable friend HUMPHREYS, the lamented associate of that most excellent Mr. BURTON. LE BAS, “*L’Obélisque de Luxor; Histoire de sa construction*,” 1839; chap. ii., “*Considerations sur la formation du terrain de la Basse Egypte—Le Nil, dans les temps anciens, n’arrosait pas la Vallée d’Egypte*.” NEWDOLD, “*on the Geology of Egypt*”—*Proceedings of the Geolog. Soc.*, vol. III., part 2, number 91, London, 1842. For the historical account of the submersion of Ancient Cities, &c., on the present site of *Lake Menzaleh* about the year A.D. 543, (which is also the date of the *first appearance* of the *Plague* at Antioch, in Egypt, Greece, etc.,) just one century prior to the Saracenic conquest; as well as for subsequent alterations, upheavals and depressions, in the “*Land of Goshen*,” that have completely altered its topography since the age of MOSES, conferre QUATREMERE, “*Recherches sur la Langue et la Littérature de l’Egypte*”—*article Baschmour*. *IBID.* “*Mémoire géographique sur l’Egypte*,” *passim*: and PRISSE, “*Excursion dans la Partie Orientale de la Basse Egypte*,” in the *Miscellanea Egyptiaca*, anno 1842; *Egyptiaca Consociatis Litteraturæ*, at Cairo; pages 45 to 51. LETRONNE, “*Le Canal des deux Mers*,” *Revue des deux Mondes*, 15 Juillet, 1840; and

But lecturing experience soon convinced me that but few of those who have not actually visited the Valley of the Nile, and not a few authors who have, with opinions in regard to the earth's superficies predicated upon local European or American topography, can adequately realize, even from inspection of the large colored map of Egypt above referred to, the curious relation that the Valley of the Nile bears to its limitrophic deserts, and adjacent provinces of Asia and Africa. To obviate this difficulty, in an effort to popularize knowledge among the masses of the people, I have latterly constructed a *sectional diagram*, which I now proceed to describe; having subjoined a list of authorities that will enable the critical reader to make a similar chart for himself.

Looking from North to South, up the Nile from the Mediterranean (as in the skeleton map, "Chapters," p. 39,) I have stricken an imaginary line, for about 780 miles in length, transversely from Arabia Petrea, through Cairo, to the Oasis of Seewah, between long. 36 and 24, and in breadth from about lat. 30 to 26, so as to include the Gulf of Akaba on the left hand, and the Basin of the Fayoom on the right.

In such a sectional arrangement the mountains of Arabia Petrea are seen to dip abruptly to the level of the Elanitic Gulf, or *Bahr Akaba*; rising again to the height of 8,000 feet in the craggy peaks of the plutonic Peninsula of Sinai, with a gradual descent at *Gebel-et-Teih* to the level of the Red Sea at its apex of Suez, and the flat land surrounding the lagoons of the Isthmus. Thence the limestone formations, commencing with *Gebel-et-Tàqa*, form a rocky table-land, intersected by the occasional *Seyàleh*, gullies and ravines, of the Eastern Desert, as far as the *Mokàt-tam* hill behind the citadel of Cairo: at which point the limestone dips from a height of about 500 feet above the level of the river, to form the subterranean basis of the rocky concavity called the Valley of the Nile, upon which, during unknown centuries, heretofore countless, the "Sacred River," has been annually beneficent *alluvium*. On the opposite, or right hand, of this basin, a chain, now surmounted by the Gheezeh group of Pyramids, to an elevation of perhaps 150 feet; whence, in a continuous table land or *steppe* of arid rock, save where the hills dip to form the fertile basins of the Fayoom and the vallies termed *Oases*, the Western high-lands trend across Africa till they lose themselves in the vast deserts of the Sahara—at a recent geological period, the bed of a salt ocean.

Colored according to the general aspect of their respective superficies, as these Mountains, Sea, and River Nile, are in my Section, the mind of the visitor of my American Lectures, will find the unique features of "Egypt's Place in the World."

He is struck with the atomic proportion that the fertile alluvium of the Nile,—little more than one per cent of cultivable soil in 780 miles of sterility—bears to the naked rock by which it is flanked; and if he carry his parallel to the Atlantic on the West, and into Arabia on the East, he becomes amazed at the infinitesimal proportion of fertility to wilderness: (see on this head, the judicious remarks of PICKERING, "The Races of Man: and their Geographical Distribution;" Phila-

"Résumé des Inscriptions Grecques et Latines de l'Égypte," Paris, 1842, page 189 et seq.) has completely exhausted every source of information on all that relates to the *Ancient Canal* of the Isthmus of Suez, from the earliest times down to its final closing by the Khaleefeh *Giafar el-Mansur*, A.D. 767.

These were the authorities, using personal knowledge of many of the localities as a discriminating guide, through acquaintance with which I constructed the colored *Maps* and *Sections* above described, for my American Lectures: yet a work, strange to say but recently accessible to me, has not only confirmed all my previous impressions, but has unveiled the necessity of any future labor greater than inspection of the Authors mentioned above. I allude to RUSSEGER, "Reisen in Europa, Asien und Afrika;" with an Atlas, Stuttgart, 1841-5. The geological questions are treated in a style worthy of one of the highest Savans and mineralogists of the day: but it is his "*Geognostische Karte von Egypten*," Wien, 1842, that excites an admiration I have not language to express; for the peculiar features of Egyptian Deserts and Valley present themselves to the eye in such exquisite colors and vivid proportions on this splendid Map, that volumes of description are rendered superfluous by a single glance.—G.R.G.

delphia, 1848, pages 13, 14;) and, when he finds that *Oases*, instead of being "fertile islands in the midst of *sandy plains*," are but depressions in the high table-rocks of Africa, (see the *plates* of EDMONSTONE, HOSKINS, PACHO, MINUTOLI, EHRENBURG, &c.) wherein the superincumbent limestone being removed, the water rises to the surface, and thus fecundates a *valley*, the beholder of my Section has to accuse his own "dabbenagine," should he continue to listen to the idle tattle about "Waves of Sand," or "Overwhelming Simooms," with which tourists, from the days of HERODOTUS, STRABO, and similar *eye-witnesses*, embellish their accounts: (Cf. "Chapters," p. 42 to 44.)

Childish veneration for the marvellous, the *præter-natural*, and the physically-impossible, on Oriental subjects in general, and on Egyptian in particular, is so sedulously instilled into our earliest European tuition, that generations, I fear, will pass away, before these and cognate superannuated delusions will cease to be promulgated:—and there are none, perhaps, whose long sojournings in the Levant, and subsequently public avocations in the West, have placed them in contact with the myriads of a people, unquestionably more enlightened, viewed as a mass, than their European contemporaries, who recognize more completely than the writer, the force of the truthful lument of an American *Savante*—"this *moyen age* adheres to us, Mr. * * * * *, like the robe of Nessus."

Yet, human history, in authenticity and antiquity of record, since CHAMPOLLION'S immortal era, begins with Egypt; and Egyptian history commences with *geology*; the only science through which the student may reach that hour, when the alluvials had been sufficiently spread over the limestone to offer natural resources of vegetation and aliment to the Asiatic nomad who first abandoned the *Hagar*, or Desert, for the shores of the Nile.

There is no other country, well observes an accurate eye-witness, like Egypt, "which the nakedness of the land enables the geologist to see in perpetual sections". "no district can present greater facilities for research than the Desert". "as the mind has little to do; for if the eye be active, every observation must be a theory, and every theory a *fact*." Those who have labored to trace out the strata in cultivated or jungle countries, will appreciate these remarks if they but turn their attention to *Egypt*:" (A. B. ORLEBAR—"Journal of the Bombay Branch of the R. Asiatic Soc.," July, 1845.—A most admirable and interesting description of Egyptian geology. I have not seen the original, but am indebted for the MS. copy before me to the kindness of Mr. RICHARD POOLE, nephew of the profoundest Arabic scholar of the age, my valued friend Mr. ED. W. LANE; Cairo, July, 1846—to both of whom I take this occasion to tender my grateful thanks.)

The next peculiarity that meets the eye is the deep trench, or ravine, through which the *Nile* now pours its fertilizing waters, its bed being the *dark loam* by itself deposited in thousands of perennial inundations; whence the various forms of the word ΚΗΜε, χημε, ΧΗΜΙΑ, *Chemmis*, ΠΑΜ (Gen. x., 6.) from the original root ΚΗαΜ, *dark*, by which designation "the dark land" of the Nile figures in hieroglyphical, Coptic, Greek, Roman, and Hebrew history. *Melambolos*, in the sense of "land of which the dry mud is *black*,"—a name of Egypt; and χωρα μελαμποδον, "land of the *black-footed*" people, like the preceding, are both appellatives derived from the *dark* color of Nilotic alluvium: (Cf. CHAMPOLLION, "L'Egypte sous les Pharaons," 1814, Ch. ii.)

The basis, or subterranean foundation, upon which this dark alluvium rests, (depth beneath its surface at this latitude unknown,) is a mighty channel rifted in the calcareous rock, the white and yellow limestones, by geological convulsions long anterior to the advent of the "sacred river." Above the limestone, and lying between it and the Nilotic alluvium, is a stratum, layer, or *couche*, composed of boulders, pebbles, gravel, sand, &c.; which, especially visible about Mansaloot in Middle Egypt, and Dendera in Upper, appears equally on the surface of the hills on either side of the valley, deposited, (after the above-mentioned limestone trench had been rent,) by Icebergs, Oceanic drifts, or similar causes produced by geological cataclysms at an epoch intervening between the limestone and the alluvial soil; posterior to the former, and anterior to the latter: thus corroborating NEWBOLD'S

assertion, that "*Egypt has twice formed the bed of the Ocean, and has been twice elevated above the water.*"

To the most ancient of these two ante-alluvial epochs, in all probability, belongs the *Bahr-béla-Mâ*, or *river-without-water*, of the Libyan desert; to the more recent the *petrified forests*, &c. of the Eastern plateaux behind Cairo. But at either, or both, of these geological periods, a vast Ocean, bounded probably by the Pyrenees, Alps, Balkan, Caucasus, Taurus, Himalaya chain of India, the mountains of America, and the Atlas and highlands of central Africa, for incalculable centuries covered this hemisphere of our globe.

Towards the latter portion of the ultimate subsidence of this Ocean, and in the ratio that its level descended to the present height of the Mediterranean, the water appears to have receded slowly in successive stages from Nubia through Egypt; laying bare successive beaches, to the eye of the conchologist, long anterior to the existing state of things; previously to the advent of the River *Nile*; and still further removed from the hour when the Asiatic nomad migrated into Egypt, *via* the Isthmus of Suez.

Such being, in brief, the general results to be derived from geological investigation of Egyptian localities, "*passons*," as the venerable DANDIN exclaims (in "*Les Plaideurs*," iii., 54,) "*passons au Déluge*:"* not forgetting the pithy rebuke of the hierogrammatist; "*the transactions, therefore, O Solon, which you relate from your (Grecian) antiquities, differ very little from puerile fables. For in the first place, you mention only one deluge of the earth, when, at the same time, many have happened.*" (PLATO in *Timæus*.)

* A very cursory perusal of the researches of eminent geologists, Lyell, Humboldt, Pictet, Elie de Beaumont, Agassiz, Morton, Owen, De la Beche, Murchison, and hundreds of others, whose labors have corrected and wonderfully extended those of Cuvier and Buckland, suffices to convince even an amateur reader like myself on this branch of modern discovery; that no such catastrophe as an *universal flood*, within the circle of time that humanity has occupied the earth, is considered historically or geologically admissible at this day, by men practically versed in the subject.

"I (as the President of the London Geological Society, 1831,) one great negative conclusion now incontestably established; that the vast masses of DILUVIAL GRAVEL, scattered almost over the surface of the earth, *do not belong to one violent and transitory period.*" "Our errors were, however, natural, and of the same kind which led many excellent observers of a former century to refer all secondary formations to the NOACHIAN DELUGE. Having been myself a believer, and, to the best of my power, a propagator of what I now regard as a *philosophic heresy*," "I think it right, as one of my last acts before I quit this chair, thus publicly to read my recantation."

A later President of the same illustrious corps, 1834, uses similar language: "Some fourteen years ago I advanced an opinion, that the entire earth had been covered by *one general but temporary deluge.* I also now read my recantation:" ("Cf. Rev. Dr. JOHN PYE SMITH, "*Relation between the Holy Scriptures and some parts of Geological Science*," London, 1841, pages 138—9, and 141.)

Thus, while on the one hand the progressive advancement of the physical sciences, in the last decade of the first half of the nineteenth century, renders obsolete, in this as in other salient particulars, the cosmogonical notions still current around us; on the other, a philological school equally profound, by the application of the same scalpel of criticism to Jewish literature, which all educated persons now recognize as infallible in respect to Roman, Greek, Sanscrit, Chinese, Egyptian, and other ancient or modern chronicles, has brought down the ages, and the writers of Hebrew annals, from a fabulous antiquity, to a *post-ESDRAS* compilation, succeeded by far more recent recensions of the Hebrew canon. There are some conscientious inquirers after truth, irrespectively of popular clamor, who may wish to know what are the authorities on these matters, most accessible to the general reader. These are referred to DE WETTE ("*Introduction to the Canonical Books of the Old Testament*," translated from the German by the Rev. T. PARKER, Boston, 1843, *passim*;) and to the Rev. ANDREW NORTON's "*Evidences of the Genuineness of the Gospels*," (Boston, 1843; vol. ii. *Appendix*, "*On the Old Testament*,") both works procurable at Mr. John Chapman's, Strand: no less than to MUNK, ("*Palestine*"—Univers Pittoresque, Paris, 1845, pages 132 to 143,) for the fairest and most succinct statement of both sides of the question.

There are others who would prefer references that might confirm their preconceived opinions on the plenary authenticity of the so-called Mosaic *Cosmogony*, and *Déluge*. These will find

To my mind there is not the slightest doubt, that the geological phenomena glanced at above, exercised of yore the ingenuity of the "Sacred Scribes" in the colleges of Memphis, Thebes, and Heliopolis; to whom these vestiges of an *ante-alluvial* Egypt were as unavoidably apparent 5000 years ago, as at this day to ourselves. The ancient quarry-man's copper-adze, stricken into the limestone to cut out a block for the earliest Pyramid, disengaged at every blow *nummulites*, *corals*, *fossil-crabs*, and *shells*, precisely in the same manner as these and larger palæontological remains are laid bare now-a-days by the iron pick-axe of the modern Fellah, forced by Osmanlee club-law to quarry stone at Toorah for the *barrages*; the difference consisting solely in the instruments, the objects, and as regards monumental permanency, in the prospective utility of the labor; the Pharaonic Egyptian working for a prince of *his own race*; "*sic vos non vobis*" being our commentary upon the unrequited toil of the present "*adscripti glebæ*." And just as the European geologist, fortified by centuries of accumulative experience, rebuilds from these remains a systematic theory of the successive revolutions and transformations which the surface of our little planet has undergone, so with less science but with equal curiosity and zeal, 2000 years before Europe had a Grecian name, did the giant intellect of "Priests and Scribes" (who created and invented those arts and sciences without the prior existence of which *Shoopho's* name could never have been inscribed phonetically on the entresols of his stupendous Pyramid,) ponder on these geological phenomena, and construct for themselves a scientific theory of ante-alluvial cataclysms; the fragments of which primitive philosophical conception, after transfer to adjacent countries, and undergoing varied metamorphoses to suit the peculiar tenets of more recent hierarchies, have perhaps descended, in Oriental literature, as our heritage to this day: (see DE BROTONNE, "*Civilisation Primitive*," Paris, 1845—for these consecutive alternations of Inquiry, Philosophy, Dogma, and Criticism.)

We arrive, in the year 1848, A.D., at scientific conclusions through the laws of inductive reasoning. Long before BACON, a learned "Hebrew of the Hebrews," versed in Hierosolymite science acquired "at the feet of Gamaliel," defined this first principle of logic in a few words: "for his unseen things from the creation of the world, his eternal power and godhead, are clearly seen, *being understood by the things that are made*;"—(PAUL, Rom. I., 20: SHARPE'S New Testament, 1844, page 284.) To deny, therefore, to the Egyptian Savan, in the due relation of the individual to his own remote age, prior to the existence of those scholastic dogmata which we Anglo-Saxons inherit, from the *East*, through the obscure medium of our own "middle ages," the same capabilities of mental ratiocination, equal powers of drawing conclusions from the same phenomenical data, appears to me unphilosophic; at the same time that, fully conceding the unavoidable errors proceeding from their very circumscribed and limited knowledge of cosmical elements and facts that 5,000 years of human progress have since developed, I am fain to recognize no superhuman knowledge among the *ancients*.

At what era of the world's geological history the River Nile, the *Bähr-el-Abiad* in particular, first descended from palustrine sources in Central Africa, along the successive levels of Nubian plateaux, through its Egyptian channel to the Mediterranean, (beyond the indisputable fact, that its descent took effect *after* the deposition of the so-termed DILUVIAL DRIFT upon the subjacent limestone,) is a problem yet unsolved. But were proper investigations, such as those commenced in 1799 by GIRARD, and cut short by European belligerent interference, entered upon, in the Valley of the Nile itself, by competent geologists, the *alluvial* antiquity of the "Land of KHEM" could be approximately reached. Nothing of a more specific nature than what is contained in the works noted at foot has hitherto been pub-

the former system most satisfactorily demonstrated by COSMAS INDICO-PLEUSTES, "*Topographia Christiana*," (MONTFAUCON, "*Collectio Nova Pat. et Script. Græc.*," vol. ii; Paris, 1706—Plate i.; pages 188—9, &c.); and the latter event thoroughly exhausted by Father KIRCHER (*de Soc. Jesu*; De ARCA NOE, vol. i. folio; with abundant *plates* of the *Ark*, its human occupants, animals, arrangements, &c.; Amsterdam, 1675.)

"Frattanto i dotti che cercano veracemente la *scienza*, poco o nulla curano ciò che per difetto di critiche prove non appartiene al dominio di quella; e da essi soli si vuole in questi studii ottenere l'assenso, senza vaghezza di riscuotere fama o favore presso i volgari." (ROSELLINI, M. C. iii., page 523.)

lished : nor, with the exception of M. LUNANT, whose position as chief engineer, and unequalled knowledge of Egyptian topography, have filled his portfolio with materials to no others accessible, is there any one living qualified, with all the new local researches, to utter a decisive opinion as to the exact antiquity of the Nile.

I confine myself therefore to a few general observations, bearing upon human *origines*, in connection with this subject.

1st.—Previously to the advent of the “Sacred River,” no deposition of *alluvium* having taken place on the limestone, Egypt was uninhabitable by man.

2nd.—Since the deposition of this *alluvium*, there has been no DELUGE, in the literal Hebrew and genesiactal sense of the term, whether in Egypt or in the countries adjacent.

3rd.—Humanity must have entered the Valley of the Nile, under conditions such as exist at this day, *after* a sufficiency of alluvium had been deposited for the production of vegetable aliment, but at a time when the depth of this alluvium was at least twenty (fifty, or more, for aught we can assert to the contrary) feet below the level of the highest portion of the Nile’s bed at this hour ; but how much soil had been previously deposited—that is, what was its *thickness* over the limestone when humanity entered Egypt—it is impossible to define.

That the formation of the *Delta* was sufficiently early to admit of man’s occupation of it at an age anterior to any *chronology*, is thus attested by an eminent judge, Sir GARDNER WILKINSON : “We are led to the necessity of allowing an immeasurable time for the total formation of that space, which, to judge from the very little accumulation of its soil, and the small distance it has encroached on the sea, since the erection of the ancient cities within it, would require ages, and throw back its origin *far beyond the DELUGE, or even the Mosaic era of the CREATION* :” (quoted in my *Chapters*, p. 43 ; but compare my observations on the *short chronology* adopted by Sir GARDNER WILKINSON, in page 52 ?)

And with respect to the slowness with which the alluvial is annually elevated, by each inundation, in Upper Egypt, the labors of Napoleon’s “Institut de l’Egypte,” are worthy of the highest commendation ; the recognition of which is to myself the more satisfying as it is lamentably the fashion among English tourists, and similar persons, to depreciate the value of truly-scientific researches, that they are unappreciated by the lapse of half a century. By me, entirely granting the unavoidable inaccuracy of the French Work in its copies of *hieroglyphical* legends, the historical importance of which *French genius* has since elicited, and thoroughly aware of the later destruction of many historical hypotheses put forth by that illustrious corps, owing to discoveries long posterior to their epoch, the “Description de l’Egypte,” on every other branch of Egyptology, is revered as a monument “ÆRE PERENNIS,”

Regali situ Pyramidum altius ;
Quod non imber edax, non Aquilo impotens
Possit diruere, aut innumerabiles
Annorum series, et fuga temporum.”

By turning to GIRARD (Tom. xx., pages 33 et seq.) the reader will understand through what processes the *mean increase in the elevation of the bed of the Nile* was ascertained to be 0°. 120 per century.

On applying this criterion to the depth of soil (metres 4, 585,) accumulated, owing to the annual rise of the river’s bed and consequent yearly-increasing height of overflow, around the base of the *Obelisk of Luqsor*, (since 1831 transferred from Thebes to the Place de la Concorde, Paris,) it was estimated by GIRARD, that “la date de la fondation des Monuments de Luqsor remonterait à quatorze cents ans avant notre ère :” (page 132.) This was written in total ignorance of the *hieroglyphical* age of this Obelisk—a deduction drawn from geological phenomena alone. Now, this monument as well as its fellow is inscribed with the names, and titles, of RAMSES III. of the eighteenth dynasty, who is said, in the legends chiselled on its face, to have “made these works (the *Propyleia* of the Palace of Luqsor,) for

his Father AMUN-RA, and that he has erected these *two great Obelisks* in hard stone before the Ramsesseion of the city of Amun." In ROSELLINI's chronology the death of RAMSES occurs at B.C. 1499;—but no authority places his reign later than the thirteenth century. Thus much on the accuracy of French researches in 1798-9.

- 4th.—The occupation of Egypt by Asiatic immigrants took place over the Isthmus of Suez, (*Chapters*, pages 42, 44, 46, 58, 59 ;) at an unknown period between the deposition of the Nile's alluvium in amount adequate for the growth of human subsistence, and the erection of the *earliest* known Monuments extant, viz., the Pyramids and Tombs of the third Memphite dynasty—according to BUNSEN, LEPsius, BARUCCHI, and others, long prior to B.C. 3,000.

In that remote age, however, the Isthmus of Suez presented physical conditions by far more aqueous than at the present day. It is just possible that the Asiatic *squatter* was already in Palestine, waiting, as it were, for the formation of a narrow strip of Land which eventually enabled him to cross over from Africa to Asia; but it seems certain, that about the age of Moses, or the fifteenth century B.C., the *Lagoons*, now close to Suez, extended northwards at least as far as Heropolis, and the Lakes Tamsah. One of the chief causes that the successive labors of DARIUS, PTOLEMY PHILADELPHUS, TRAJAN, HADRIAN, and the Caliph OMAR were required to clear, re-excavate, and re-open the bed of the ancient Canal attributed (erroneously in all likelihood,) to NECHO or to SESORTRIE, was not, as ignorance of the localities leads travellers to assert, so much owing to the accumulation of *sandy obstructions* whose influence even here has been exaggerated, but is due to a gradual upheaval of the *rock* beneath and around Suez, from the same subterranean action which has elevated the *coral-reefs*, in that part of the Red Sea, some *six feet* higher than the level of the water; above which the Polypi cease to carry on a system of animal construction essentially submarine. If with these data before him the reader will consult learned disquisitions put forth on the *Erodus of the Israelites*, wherein the geological and topographical transitions now submitted to his intelligence, no less than infinite historical impossibilities to which pending commentaries are obnoxious, are totally disregarded, he will find, that they have to be commenced "*da capo*," and *re-written*, to be of any real utility or durable scientific value.

- 5th.—Many centuries (in number utterly unknown) must be allowed for the multiplication of the human race in *Egypt*, from a handful of rovers to a mighty nation; and for the acquirement, by self-tuition, of arts and sciences adequate to the conception and execution of a Pyramid—thus giving us a *blank* amount of chronological interval: bounded on the one hand by the unknown depth and surface of the Nilotic alluvial, sufficient for the growth of human food, at the time of the Asiatic nomad's arrival; and on the other, (after this nomad had been transmuted by time and circumstance into a farmer and then into a monument-building citizen,) by the *Pyramids* of the third dynasty.

Such is the scale in which *Egyptian Origins* have been considered in my American Lectures; and these are my points of departure in studies I am now prosecuting in Europe for elaboration into future transatlantic discourses. But to enable the reader to comprehend some elementary geological and geographical conditions left out of sight by *short* chronologists, or but feebly discussed in any works of that school yet known to me, I subjoin *three diagrams* in wood-cut, the study of which will be found curious and interesting.

They have been prepared in conjunction with my esteemed fellow-student, Mr. JOSEPH BONOMI, whose intimate knowledge of every locality here indicated is a voucher for their accuracy within the very concise limits in which the ideas are embodied. No claim is made for them beyond approximative correctness; but having been drawn to a scale to suit Mr. SAMUEL SHARPE's excellent "*Map of Egypt*," (under Antoninus Pius, A.D. 140—London, 1848,) the reader will find that chart of material assistance to their complete intelligence.—G. R. G.

APPENDIX E.

And here I could exclaim with Cicero, "*isidem in armis fui*;" the more legitimately, as it is the fashion in modern as well as in ancient Egyptian matters (see *Chapters*, p. 8, 9,) to suppress the sources whence some authors derive that information of which they make parade. My space is brief; the subject irrelevant to the argument in hand; nor, considering the *autographs* in my possession, is circumlocution necessary: my object now being merely to "*prendre acte*," while I attempt to inform the reader that, in Egyptian matters, I have some right to speak "*avec connaissance de cause*."

It is, however, desirable to premise, that in the course of multifarious commercial, official, magisterial, administrative, and political avocations at Cairo, from 1831 to 1841, I had been connected, directly for years, indirectly always, with the "*Transit to and from India*," since the earliest voyages of the "*Hugh Lindsay*."

During a period when I was absent in the United States, Mr. ARTHUR ANDERSON, Managing Director of the *Peninsula and Oriental Steam Navigation Company*, published a Pamphlet, entitled, "*OBSERVATIONS on the Practicability and Utility of Opening a Communication between the RED SEA and the MEDITERRANEAN, by a Ship Canal*," &c.—"*Also, EXTRACTS from a Manuscript Memoir of a Survey of the Isthmus, by M. LINANT*," &c.: London; Smith, Elder, and Co., Cornhill; 1843. [Unseen by me until the 29th June, 1844, when I was residing at Philadelphia.]

The readers of this pamphlet are distinctly told, that "*the Writer has had the means of obtaining information relative to this matter, which he considers may be relied on*," (p. 4); no less than "*that the matter was some time since submitted by him to the consideration of Her Majesty's Government*," (p. 5); but they will seek in vain in its pages for the name of the *only* party to whom Mr. ANDERSON was indebted for every iota of these Egyptian facilities. "*Sed tulit alter honores*."

Mr. ANDERSON had been some weeks at Cairo, entirely unsought by me, before he did me the honor to call at my house, and, after introducing himself, solicit my personal assistance. Ignorance of French or Italian, and unacquaintance with the usages of the people, and routine of affairs in our Oriental community, had rendered the efforts of the "*Managing Director of the Peninsula and Oriental Steam Navigation Company*," in obtaining satisfactory aid from any other quarter, singularly abortive: and every *information*, relative to this matter, which he considers may be relied on," was, by the author of the above-mentioned pamphlet, obtained *gratuitously* at Cairo, either from myself exclusively, or solely through my personal acquaintance, and medium.

With reference to the publication of the *Manuscript Documents*, of which a catalogue is now subjoined, would supply sundry curious "*paralipomena*" of Mr. ANDERSON's "*Observations*."

- A.. "*Conditions et Engagements, entre Monsieur ARTHUR ANDERSON de Londres, et Monsieur ADOLPHE LINANT de l'Orient, et Conventions entre ces deux personnes et Messieurs JOHN GLIDDON et GEORGES GLIDDON, établis au Caire*:" "*Fait au Caire, le 19 Fevrier, 1841*."
- B.. MEMOIRE sur la *Communication de la MEDITERRANEE à la MER ROUGE, par Alexandrie, le Caire et Suez: ou DIRECTEMENT par l'ISTHME; avec une Critique du Projet de Monsieur CORDIER*—par A. LINANT, Inspecteur en Chef des Ponts et Chaussées. Caire, le 15 Decembre, 1840:" with colored map: (quadruplicate press-copy of M. LINANT's autograph.)
- C.. *Correspondence* between ARTHUR ANDERSON and GEO. R. GLIDDON, on the above subject.
- D.. *Ditto*, between A. LINANT and GEO. R. GLIDDON.
- E.. *Ditto*, copies of, between the late JOHN GLIDDON and the above parties.
- F.. CONTRACT between ARTHUR ANDERSON, Esq., Managing Director of the *Peninsula and Oriental Steam Navigation Company*, and GEO. R. GLIDDON, entered into at Cairo, 20th February, 1841.
- G.. GEO. R. GLIDDON's "*PLAN for the Transit of Mails, Passengers, and Merchandize, to and from India, via Egypt, monthly or bi-monthly*."—Dated Cairo, 31st March, 1841.

- H.. Correspondence between the Board of the Pen'sula and Oriental Company and GEO. R. GLIDDON ; closing with the delivery, by the latter to the Board, of the above "Plan," (after its submission to H. M. Foreign Office, as per stipulated agreement with Mr. ARTHUR ANDERSON,) in London, 29th June, 1841.
- I.. Correspondence between ARTHUR ANDERSON, from Alexandria and Constantinople, and GEO. R. GLIDDON in Egypt and in London,, 1841.
- K.. Copies of Correspondence between the late JOHN GLIDDON and ARTHUR ANDERSON, and of GEORGE R. GLIDDON with the former, in relation to the above "Plan," 1842, 1843.
- L.. *Incidental and Miscellaneous Papers* ; among them the MS. of " *Strictures on the Transit to India viâ Egypt*, by GEO. R. GLIDDON, Cairo, 1836 ;" which, although transmitted in good faith to parties in London for immediate publication, was withheld from the public eye ; its contents being surreptitiously made use of in high quarters, in contravention of its author's objects and intentions.

The reader is referred "en attendant," to my pamphlets, No. 1 and No. 2, ("A Memoir on the Cotton of Egypt," pages 38 and 43, and APPENDIX ; and "Appeal to the Antiquaries of Europe on the Destruction of the Monuments of Egypt," pages 3, 134 and 135, 148 to 155, and final note ; London, James Madden and Co., 1841 ;) for the *political* opinions avowed by me in respect to the future destinies of Egypt ; while I solicit his attention to the fact of MOHAMMED ALI's actual superannuation ; the recent death of the latter's STEP-SON, his so-called "hereditary" successor to the Vice-Regency, IBRAHEEM Pasha ; and the temporary nomination of the grandson, ABBASS, to the Pashalic.

I postpone the elaboration of these themes to "MEMOIRS historical, political, and anecdotal," of my personal acquaintance with *Modern Egypt and Egyptians* from 1818 to 1841 ; while the only apology I can offer for the otherwise superfluous insertion of the present Note into "Lectures on Egyptian Mummification," is that, in default of the ancient art of pickling their bodies, the memories of a number of august personages, who during this interval have figured in Nilotic annals, shall be transmitted to posterity, duly embalmed.—London, 20th December, 1848. G. R. G.

POSTSCRIPTUM.—In reference to the relation between the *sizes* of the two largest Pyramids of Gheezeh and the lengths of the *reigns* of SUPHUS I. and II., (See *Ethnological Journal*, No. 7, page 298,) I was not then aware of Dr. HINCKS' discovery, in the *papyrus* "Turin Book of Kings," that each of the kings in the latter (*fourth* Memphite) dynasty, the supposed builders of the great pyramids, is said to have lived *ninety-five* years. Their names, and the lengths of their reigns, are unfortunately lost." (R. Soc. of Lit.—vide *Literary Gazette*, 11th November, 1848.)

While, in the pending state of hierological inquiries, I look upon the "Turin Papyrus" as but an *adjunct* in the reconstruction of Egyptian chronology, I am happy to accept, for what this Papyrus may be worth, such a striking confirmation of the accuracy of my assertion, "that the *sizes* of Pyramids are in direct proportion to the *length* of the reigns of the Monarchs who built them."—G.R.G.

LECTURE VII.

The Art of Mummification, Continued.

THE lecturer prefaced his exposition by adverting to the theory put forth by Dr. PARISET, * that the original cause of Mummification was to be

* "Mémoire sur les Causes de la Peste, et sur les moyens de la détruire," Paris, 1837—published by Dr. PARISET, on his return from the Levant, whither

found in a hygienic motive, the desire to keep away the *plague*; and stated that on a preceding occasion he had dwelt on the simple rationalism of *sand* burial, in order to show how unnecessary it is to seek in precautions against a disease which did not exist until 543 years *after* Christ, for the origin of an institution which antedates that event by fifty centuries. He briefly recapitulated his preceding lecture, and then described the localities where mummies are most abundant.

They are found in greatest profusion at Memphis, and at Thebes. The Necropolis at Memphis is twenty-two miles in length, by about half a mile in breadth, and here it is supposed that one fourth of the entire population of Egypt was buried.

Every provincial temple was provided with an establishment for the purpose of mummification. Here the bodies were delivered to the priests to be embalmed, and after seventy days restored to the friends to be carried to the place of deposit. The paintings in the tombs represent funeral processions, in which we see the mummy transported in cars, or borne on sledges drawn by oxen, and attended by mourning friends. The mummies of Jacob

he had been sent by the French Government about 1828-30, to examine and to report on the *Plague*—a disease which, singular to relate, he never *saw*, in Egypt! The fallacies of this report were refuted in a masterly manner by CLOT-Bey, "sur la Peste," 1840; but finding that the untenable hypothesis of Dr. PARISSET has misled such eminent Egyptologists as CHAMPOLLION-FIGEAC, ("L'Egypte Ancienne," pages 94, 95,) HENRY, ("L'Egypte Pharaonique," I. page 327,) CHERUBINI, ("Nubie," page 62), and many other distinguished Frenchmen, I devoted some time to its analysis, and could at once produce in MS. its "*reductio ad absurdum*." The theory, that *mummification* owes its origin to the object of keeping away the plague, if in one sense sufficiently original, antedates Dr. Parisset, having been put forth, thirty years before, by the erudite but imaginative Volney; and it is based upon such ignorance of Egyptian atmospheric and geological conditions, of history, monumental as well as classical, of ancient religious customs and necessities, and of hygienic laws that medical science has elicited at Paris itself, that I marvel how such an explanation could have suggested itself to a rational mind, still more to a *Physician*. The laws I allude to have been discussed with extraordinary acumen, involving a multitude of facts, by my learned friend and colleague in anthropological inquiries, Dr. G. R. G. ("Géographie Médicale"—"Statistique de la mortalité des Armées," 1842-6), and that I have some personal acquaintance with, from practical experience, Dr. G. R. G. (1813, when I was too young to preserve more than a shuddering recollection of some family incidents,—those of Alexandria 1819-20, 1820-21, 1823---a chance rencontre with this disease, at St. Jean d'Acre, 1830, and at Constantinople, 1836---I was of the very few Europeans, perhaps the only Consul, at *Cairo*, who attended to out-door commercial and official duties, no less than to the dead and dying, during the awful visitation of 1835; when some 57,000 of that city's population were swept off between the 10th February and the 17th June: (Lowell Institute Lectures---see *Boston Evening Transcript*, 4th Dec, 1843.) Some adventures of those days are well remembered by my colleagues at Musr-el-Qahirah, especially by a fellow-countryman, Mr. A. C. HARRIS; who was residing with me in the "Hotel de la Peste" when the plague first appeared. It need scarcely be added, that, during this period, which I observed at this long period of gloom and horror, I ceased thenceforward to regard *Quarantines*, except domestic and on the voluntary principle, as vestiges of "moyen age" ignorance and barbarism; the perpetuation of which, by interested "clap-trap," is a foul stigma on the intelligence of the nineteenth century.—G. R. G.

and Joseph, (Gen., i. 5, 26. ; Exod., xiii. 19,) were thus carried from Egypt into the land of Canaan. Sometimes this procession is made in boats, on the Nile, canals or lakes ; whence, in latter times, probably arose the Greek fable of the boatman Charon. The practical utility of mummification in Egypt is made evident, (inasmuch as the distance, from the place where the deceased died, to the rocky tomb wherein the body was to repose, was sometimes very great,) in the *portability* of embalmed bodies. At the present day great inconvenience is often experienced at funerals, in so hot a climate, for want of the ancient art.

Mr. Gliddon discussed the period when mummification was first practised in Egypt. It must have preceded the building of the pyramids and tombs, because vestiges of mummies have been found in the oldest of these, and, in fact, the first mummies were buried in the sand, before the Egyptians possessed the necessary tools for excavating sepulchres in the rock. In the time of Joseph the art was not new.

MANETHO and CLEMENT Alexandrinus mention circumstances which lead us to infer the existence of manuscript treatises on the art between 3,000 and 5,000 years ago : which is confirmed by passages in the *Book of the dead*. All modern writers allude to it. The Church forbade it as a heathen custom. St. Augustine remarks, in his Sermons, that the " Egyptians alone believed in the resurrection, because they carefully preserve the bodies of their dead,"—"for," says he, (alluding to his own time, A.D. 354 to 430,) " they have a custom of drying up the bodies and rendering them as durable as brass."—About A.D. 356, we find St. Anthony fulminating from the pulpit anathemas on all Christians who still embalm their dead. The body of the Coptic martyr, St. Epimus, was embalmed by his disciples, just as the bodies of Jacob and of Joseph had been preserved 2,000 years before the corpse of the Saviour was received and consecrated by Joseph of Arimathea. Embalming did not entirely cease in the East until the seventh century after Christ, or the Muslim invasion.

From the building of the Great Pyramid in the fourth Dyn., until this date, gives us a period of 4,000 years. The Lecturer then proceeded to make an estimate of the number of mummies in Egypt. Let us call the period of mummification 3,000 years, which would be greatly below the mark. The average population of Egypt during that time probably amounted to five millions, which died off every generation of thirty-three years. We have, then, by a simple process of calculation, 450 millions of mummies for the 3,000 years ; but as the time was probably more than 3,000 years, the number of mummies might be estimated in round numbers at five hundred millions.*

* This estimate of the number of Mummies is founded upon the ingenious calculations of HENRY ("Egypte Pharaonique," II. pa. 55 et seq.) ; and it approximates to the amount upon which the sapient editors of the "*Lo Spettatore Egiziano*" (*e fructibus eorum cognoscetis eos*.) a Mohammed-Allist organ vegetating at Cairo, endeavoured to show, how 420 millions of Mummies would, if divested of their linen wrappers, yield 420 millions of metrical quintals of cloth ; which, when converted into paper, would produce to the Pasha's treasury, twenty-one millions of dollars, say £4,200,000 sterling ! (vide London Times, 12th May, 1847.) Finding that such a preposterous notion was going the rounds of the press of England, and of the United States, not only without refutation but with applause, I consigned it to the tomb by two articles, exhibiting that this is not the only matter, in

Mr. Gliddon made another illustration. The stature of the Egyptians was rather below the European standard, and the average length of a mummy, in its wrappings is, therefore, about $5\frac{1}{2}$ feet, its breadth within $1\frac{1}{2}$, and in height about the same. These 500 millions of mummies would, if piled up together, make a cube of half a mile in length, breadth, and height. The space occupied by the mummies of Egypt was in fact, he said, very large, some of the tombs of a single individual covering several acres of subterranean ground.

Mr. Gliddon proceeded to give several interesting and unpublished facts from Mr. Birch's manuscripts in relation to the changes in the mode of preparing mummies, and the shape and ornaments of the coffins.* The processes of embalming as well as the inscriptions upon the coffins, were in early times very simple. The oldest sarcophagus found in the pyramids had no inscription at all.

At the remote age of the fourth Dynasty, the bodies, as in the case of King *Menkare*, were prepared by saturation with natron, baking in ovens, and wrapping in woollen cloths—linen in that day being probably unknown.

In the mummies of the twelfth Dynasty, this material is already in use; the bodies are partially gilded, and great luxury seems to have been introduced in decorations of coffins, ornaments, &c., which was carried to vast extravagance from the eighteenth Dynasty down to Roman times. In the absence of other indications, such as royal names used for dates

connection with the Pasha's financial schemes, in which "*Montes parturiunt, nascitur ridiculus mus.*" (see Boston Evening Transcript; 23rd June, 1847;—The American Mail; New York, 3rd July 1847;—and for a rich instance of the expedients suggested to MOHAMMED ALI for "raising the wind," compare my "Appeal to the Antiquaries," 1841; note, pages 129-131.)

It was shown by the authors of the great French Work, that, to contain 400 million mummies, a gallery about twelve-feet square should be carried in the Libyan hills four times between the Pyramids of Memphis and the first Cataract, a distance exceeding 600 miles! Yet the excavations for sepulchral purposes alone, and still in existence, are sufficiently vast to contain all the bodies ever embalmed; even without the successive spoliations of earlier, and refilling with later corpses, caused by Hykshos and Persian devastations, many instances of which are familiar to the hierologist. The enormous capacity of some of these subterranean cemeteries may be judged by that of the tomb of PET-AMUNOPH in the Assasseef, Thebes---862 feet of galleries, occupying an underground area equivalent to one and a quarter acre: (WILKINSON, "Mod. Eg. and Thebes," II, 222.) And leaving aside the royal sepulchres at the Biban-el-Melook which held but one or at most two sarcophagi, similar extraordinary statistics result from the admeasurements of the tombs of DJOKANPEFRAN at Saccara, and of PHAIKOPENTRAT (mischristened Col. Campbell's, as this functionary did not die in Egypt,) at Gheezeh. G. R. G.

* In the second lecture (Ethnological Journal, No. VI, note in page 256,) I expressed my indebtedness to Mr. Samuel Birch of the British Museum for an invaluable classification of Sarcophagi and Mummy-cases, which, with unparalleled knowledge of the subject, and his wonted zeal in the cause of science, he has been so good as to favour me with, in 1846. On mentioning to him my wish to have some of the present occasion, of researches so eminently critical in a large measure unknown, Mr. Birch kindly volunteered a synopsis of his labors for the Journal; and in the form of an Appendix, the reader will find some remarks that, coming from so high an authority, will be perused with instruction and interest. (Vide infra, page 467.) And in connexion with the subject of Bitumen, reference is especially made to Mr. Birch's Papers on the "Obelisk of Thotmes III. in the Atmeydan" at Constantinople, and on "The Statistical Tablet of Karnac." (Trans. R. Soc. Lit. vol II. 1847.)

in the inscriptions, &c., the relative antiquity of mummies can be deduced from the successive *fashions* of embalmment. Of these, the epoch of *Bitumen* forms a grand era, at the 18th dynasty; for then this substance which was unknown to the Egyptians prior to the conquests of Assyria by the early Pharaohs of the 18th dynasty, began to be used. Mr. Birch has discovered data which indicate very distinctly the epoch when bitumen began to be adopted in mummification. Among the articles of tribute exacted by Thotmes III., in the 16th century before Christ, from the conquered princes of Nineveh, Shinar, Naharina, Babel, and other Mesopotamian provinces, which are recorded on the tablet of Karnac, now in the Louvre, it is said that the Chief of the country of HIS (or IS of Herodotus) brought as tribute to the Pharaoh, 2080 ingots of bitumen. Mr. Gliddon exhibited LERSIUS' copy of this Tablet, and other documents attesting this early conquest of Assyria. Now as bitumen is an Asiatic production abundant near the Euphrates, it was inaccessible to the Egyptians until Assyria was conquered by the Pharaohs of the 18th dynasty; which accounts for its absence in the Old Empire; that is from the 1st to the 12th dynasty.

Mr. Gliddon produced specimens of this bitumen, with the remark, that, while the presence of bitumen, in two embalmed heads he showed the audience, proved that these persons could not have lived before the 18th dynasty, it was this blackening substance which had altered the primitive Caucasian color of their skins; for a beautiful female *foot* of the olden time he held in his hand, still preserved its light brown hue, having probably been embalmed before bitumen was introduced.

He pointed out an engraving of the mummified head of a Negress, from the "*Crania Ægyptiaca*" of Dr. Morton. This relic he stated had been found by himself in a tumulus at the Island of *Beghe*, 1st cataract, in 1840; and was the only mummy of an unmixed Negro or Negress that he had ever seen or heard of among the sepulchres of Egypt.

"In the study of Oriental antiquity," continued the lecturer, "we possess no single criterion, in applicability sufficiently universal, wherewith to test the advancement a given people may have made, so felicitously simple as that chemical recipe formulated by a recent *Saran*; viz., "that the *civilization* of a given European nation is in direct proportion to the *gallons of sulphuric acid* by its population annually consumed:"—nor can we, herein, adopt the suggestion of another philosopher, and "measure the *progress* of (ancient Eastern) countries by the *tonnage of soap* yearly exhausted by their inhabitants."

"Nilotic antiquity, alas! affords us no such touchstone for ascertaining the extent of its civilization as *sulphuric acid*, or *soap*! Its development in arts and sciences must be measured, not by any one feature of social polity taken singly, but through the judicious union of the multiform elements that combine to unfold to us the maximum of progress which, at successive epochs, the Egyptians had attained. Yet, were we to select one subject that, more than any other, from the all-comprising grandeur and detailed minutæ of its ramifications, would attest the onward march of humanity in Egypt, from its ante-monumental stage of nomadism, down to the most brilliant chapter of its history storied hieroglyphically in the two *millennia*

sculptured seriatim on stupendous *Karnac*—(a vast cycle of time, in which, so far as Egyptian annals be concerned, the early antiquities of Judæa, Greece and Rome, are but *parentheses*—things which can be omitted without much detriment to the sense)—*that* subject is MUMMIFICATION! In *geographical* range it ascends the Nile 1600 miles from the Mediterranean to Meroë; resting its Eastern wing on the hypogeums of Midiân and Idumæa; while its Western follows Libyan affiliations, through the Oases and Numidia, perhaps to lose its last forms among the hapless *Guanches*, whom Portuguese cruelty extinguished, during the 13th century, at the Canary Isles of the Atlantic. In *chronological* duration, mummification, as has been shown, antedates all human history, all monumental record; and accompanying its phases down to the 7th century, A.D., we behold it embracing, within its mysterious circumference, a period of man's funereal necessities exceeding 5,000 years. In *numerical* amount, and its consequent bearings upon the statistics of population, we find, that Egypt alone furnishes data whereby the incomprehensible term of 500 millions of human mummies fails to convey an idea of their incalculable number."

"Mr. Gliddon closed by an eloquent allusion to the people of this by-gone time. Before him lay the mummied heads of a man and a woman; the foot of a girl, and the gilded hand of a lady. To these he referred in thrilling language, to which our space, (*Mobile Tribune*, 27th February, 1848,) not admitting our doing justice, we give but a mere outline of its substance."

Enquire of these parched and shrivelled lips, what were their owner's vocal articulations—what his modes of thought, his diurnal avocations, and his nocturnal pursuits?

The gentle owner of this exquisite foot danced in girlish gladness to the sounds of harps which were struck long ere David sang. For we have paintings of harpers and harps in the tomb of Ramses IV. at Thebes, in the fourteenth century, B.C., or 400 years before David; and harps and lutes, of seven to thirteen strings, are found depicted in the tomb of the *architect* of the Great Pyramid, twenty centuries further back. [See the plates in ROSELLINI's or CHAMPOLLION's "*Monuments of Egypt*;" but my Lecture-room exhibits these and similar subjects in 100 mounted plates of CAILLEAUD's "*Arts et Métiers des Anciens Egyptiens*," procured from the celebrated author, Paris, 1846, in advance of publication.]

Or ask this scorched though gilded hand, to trace in hieroglyphics upon papyrus paper the memoirs of a lady, whose will its delicate fingers obeyed at a date when the Hebrews possessed no *alphabet*, and when the Pentateuch was yet unwritten.

Albeit these débris are to us but the types and emblems of a vast family of the human race; that, while Grecian antiquity was yet young, and Roman non-existent, numbered myriads of population—faint shadows are they, and partial indices, of a colossal nation, the grand parent of civilization—that discovered the germs of all present arts, constructed mighty and imperishable works, and transmitted to the *Champollion school* those precious documents, through the deciphering of which the glory of Egypt now resiles brilliantly from her translated hieroglyphics, and gives her annals the highest place in the pages of the world's history.

In this man's skull, one which, after 3,000 years of time, so perfect is his embalment, would be recognized by us as an old acquaintance had we known him in his life-time, we behold one of ourselves—a Caucasian, a pure white-man; notwithstanding the bitumen which has blackened the skin. The same with this female head, of a girl of fifteen, whose hair, reddened though it be by embalment, is soft and silky still. How surprised would both of these individuals be, could we recall them to life, to learn that we moderns have actually speculated in learned works, whether their countrymen were *Africans* or even *Negroes*—whether the color of their skins was not (as the Egyptian males and females are painted on the monuments,) crimson, or yellow; or, black as they now are with bituminous saturation—whether their ears were not placed on their heads higher than our own, even if they were as long—whether their feet were really canoe-shaped with the hollow reversed—or their hair actually wool!

Could a people gifted with such facial angles, elevation of forehead, smooth hair and aristocratic noses as these, fail to be great men and great women?

Was it in nature, or are anatomical laws so false, that a people with such physiognomical and osteological characteristics—a people whose mighty deeds are still erect in stone, and who are renowned beyond all others in sacred and profane history for their *wisdom*—should not possess a development of head and volume of brain commensurate with the grandeur of their works?

In the face of such matter-of-fact and tangible evidences as are extant in the mummies themselves, corroborated by paintings, sculptures and records of every age and variety, cavils are vain—denials become childish. These pictorial illustrations, faithful copies of Nilotic monuments, are, as LETRONNE* observes, “the contemporaneous testimonies that seem to spring up out of the earth expressly to confirm history.” These fragmentary vestiges of Egyptian humanity, and those plates of the “*Crania Ægyptiaca*” enable us to realize with MORTON, the actual existence, in the year 1847, of Egypt's “vast sepulchres, whence the dead have arisen, as it were, to bear witness for themselves and their country.” [Vide “*Récueil des Inscriptions Grecques de l'Égypte*,” Paris 1842, *Introduction*, p. xliii:—and “*Crania Ægyptiaca*,” Philadelphia, 1844, page 1.] †

* While these lines are passing through the printer's hand, the Parisian press conveys the mournful intelligence of the demise, on the 15th inst., of this illustrious and most excellent gentleman. The world of science has to deplore the loss of one of its highest ornaments: European archæology, that of her brightest luminary: Egyptian studies, through LETRONNE's decease, that of the “*primus inter pares*” of their patrons. As one who has been honored with many proofs of M. LETRONNE's benign liberality of instruction, the writer cannot withhold this humble tribute of respect to his memory, coupled with unaffected sorrow at the death of a friend whose kindnesses are too prized to be forgotten.—G. R. G.

† Regretting extremely that want of space now obliges me to restrict the expression of my grateful remembrance of Dr. SAM. GEO. MORTON's friendship, and my admiration of his laborious achievements in Egyptian Ethnography, to a brief note, I can only here confirm the sentiments uttered in 1843, (*Chapters*, pages 45, 46.) Another craniological work on Ancient Ethnography, augmented with a mass of new archæological information, and founded upon the latest discoveries, I am happy to announce, is forthcoming from Dr. MORTON's pen.

It is through Dr. Morton's researches, that the “*vexata quæstio*” of the

LETTER

TO MR. GEORGE R. GLIDDON, ON

VARIOUS ARCHÆOLOGICAL CRITERIA FOR DETERMINING
THE RELATIVE EPOCHS OF MUMMIES.

FROM SAMUEL BIRCH, Esq., of the British Museum.

(Appendix F. referred to ubi supra, page 363.)

DEAR SIR,

THE attempt to lay down a few general diacritical rules for the determination of the ages of mummies may not prove unacceptable to you; although I cannot, in a short space, give all the intermediate steps on which the results of my investigations are based. These depend mainly on philological considerations; and one, not the least in importance in this respect, is nomenclature. It is an important law, that the officers of court, and other personages of consequence, out of flattery to the reigning monarch, named their children after him; and accordingly we never find an *APRIES* in the epoch of the twelfth, or an *OSORTESEN* at the twenty-sixth dynasty. This is a fundamental rule, to be borne in mind, when considering the epochs of mummies. The persons named *Apep—Amenemha—Usrtesen—Thothmes—Rameses—Psametik*, must have been born in the reigns of Monarchs having these names: conse-

African or Asiatic origin of the Egyptian race has been irrevocably settled in favor of their *Caucasian* derivation; a conclusion that now ranks among "les faits acquis à la science."

Others, it is true, (see *Chapters*, p. 58,) had advanced opinions in support of the *Asiatic* origin of the denizens of Egypt.—PETTIGREW ("Encyclopædia *Ægyptiaca*," London, 1842, pages 2, 3,) following BLUMENBACH and LAWRENCE, touched on the probability of the ascent of civilization along the Nile from North to South, introduced *ab-initio* into Egypt by an Asiatic people. This view had been previously advocated in the admirable works of DE BROTONNE, ("Histoire de la Filiation et des migrations des Peuples," Paris, 1837; I., pages 210, 217;) of JARDOT, ("Révolutions des Peuples de l'Asie Moyenne," Paris, 1839; I., page 155;) and a century ago the profound academicien FOURMONT had contended, that "les Egyptiens, pour les trois quarts, sortoient ou de l'Arabie ou de la Phœnicie; "l'Egypte étant composée de peuples Chaldéens, Phœniciens, Arabes, &c., mais surtout des derniers." ("Réflexions sur l'Origine, l'Histoire, et la Succession des Anciens Peuples," Paris, 1747; pages 303, 383.)

It has been adopted without reservation, on philological, historical, and monumental grounds, by BUNSEN, ("Egypt's Place," 1848, pages 8 and 444;) and on mythological as well as linguistic by LANCE, ("Paralipomeni," 1845, *passim*.)

But, *philology*, if one of the most available, is not always in its results the safest guide in establishing identity of *race*, or unity of human origins, among nations which speak the same tongue. Thus, for example, the Hebrews, who for the last sixteen centuries, though scattered over the earth, have preserved their blood purer from foreign admixture than any other people, have totally forgotten the oral use of their original tongue, and now adopt as their own the language of every nation among whom they sojourn. At the Island of Madagascar, three different races of mankind, Caucasians, Negroes, and Malays, notwithstanding the diversity of their respective origins and habitats, unite in the use of dialects of one and the same tongue. While, if *language* alone, uncorrected by the more positive science of craniological anatomy, were to be taken unexceptionally as the criterion for establishing primitive identity of sanguineous origin, among races of men at this day utterly distinct, a thesis might be sustained, by some skilful *philologer*, that the natives of Paris were originally Africans, because the Negroes of St. Domingo

quently the fashions and formulas which prevail on the coffins of these persons may be safely referred to these epochs. Another law not less safe is the presence, in the inscriptions, of particular *characters*, which do not appear in the hieroglyphics, till certain epochs. I shall subsequently allude to some of these. The subject may be roughly divided into ages, as follows :—

I. *Pyramid age* :—From the Third to the Twelfth Dynasty.

The sarcophagi, mummies, and other sepulchral remains of this age are comparatively few. Not only have the haughty pyramids attracted the cupidity of the plunderer, and their remains been despoiled of their dead, but even the vast cemetery of Memphis has been emptied of its tenants by resurrectionists and jackals at a time as early as the Greek rule. The distinguishing feature of this age is its great simplicity. The sarcophagus which held the mummy of CHEOPS is a plain monolithic bin ; the outer Sarcophagus of MYCERINUS, unfortunately lost at sea, was a rectangular chest, decorated only with the representation of the portcullises or door-ways. The inner sarcophagus was of wood, apparently a kind of cedar, inscribed down the body with two lines of hieroglyphics, but without any figured representation. This inscription, which occurs also on coffins of an epoch much posterior, is a speech taken out of the drama or mystery of the Osiris-mythos, and is

converse in *French* ! See the excellent remarks, together with other examples, of PICKERING, ("Races," pages 277, 278.)

"Il faut donc, with D'AVEZAC, se garder de conclure de la similitude des langages la similitude d'Origine :"—It is through their harmony in ultimate results, that the proper application of different sciences to the elucidation of a given subject must be judged ;—principles developed with sublime eloquence by HERBOLDT, (Introduction to "Cosmos," 1846, French edition ;) and it is to this masterly analysis and synthesis of *facts*, elicited from "History, Anatomy, and the Monuments," that the "Crania Egyptiaca" has marked a new era in Egyptian studies, and won for its author a testimonial of applause that, proceeding from an illustrious Ethnologist, conclusions are at variance with the doctrines espoused by : . . . does equal honor to Dr. PRICHARD's love of science as to the . . . heart.

"A most interesting and really important addition has lately been made to our knowledge of the physical character of the ancient Egyptians. This has been derived from a quarter where local probabilities would least of all have induced us to have looked for it. In France, where so many scientific men have been devoted ever since the conquest of Egypt by Napoleon, for a long time under the patronage of government, to researches into this subject ; in England, possessed of the immense advantage of wealth and commercial resources ; in the academies of Italy and Germany, where the arts of Egypt have been studied in national museums, scarcely anything has been done since the time of Blumenbach to elucidate the physical history of the ancient Egyptian race. In none of these countries have any extensive collections been formed of the materials and resources which alone can afford a secure foundation for such attempts. *It is in the United States of America* that a remarkable advancement of this part of physical science has been at length achieved. 'The Transactions of the American Philosophical Society.' (Vol. ix., New Series, Part i., Article 3 ; 1844 ;) contain a memoir by Dr. MORTON, of Philadelphia, in which that able and zealous writer, already distinguished by his admirable researches into the physical character of the native American races, ("Crania Americana," 1839,) has brought forward a great mass of new information on the ancient Egyptians." (PRICHARD, "Appendix to the first edition of *The Natural History of Man*," London, 1845 ; § ix., pages 570, 571.)—G. R. G.

the address of Isis over the recomposition of the limbs of Osiris. The appearance of this mythos at so early an epoch is singular, as showing the extremely remote era of its development. I here give a revised translation of its import; "*Osirian king MEN-KA-RE, live for ever! born of the heaven, [beloved] issue of Seb—thy Mother Nutpe (the firmament) is spread over thee, in her name of the extent of the heaven; she has accorded thee to be as a god—annihilated are thy enemies King MENKARE, live for ever!*" The only other coffins and mummies referable to the period of the fourth dynasty, are those of the workmen employed in the Tourah quarries. These were plain uninscribed sarcophagi, containing dried bodies, only enveloped in coarse woollen and matting wrappers; resembling the body found in the chambers with the fragments of the wooden coffin of the King MENKARE, the authenticity of which bones however has been questioned. There are no sarcophagi or mummies in Europe referable to so early a period: and we are consequently without the means of determining, from these remains, more than the fact of the application of the Osiris-mythos to the deceased; coupled with the absence of bitumen, and the simpler preparation either by salting or desiccation.

Of the period which intervenes between the fourth and the eleventh dynasty there are no mummied remains, in Europe at least—although tombs executed for individuals who flourished in the fifth, sixth, and subsequent dynasties, as well as considerable monuments of the intermediate period, have been found: but of the eleventh or ENANTEFS we possess at least three coffins, discovered in the sepulchres of that family at Gournah. I infer that the ENANTEFS were the eleventh dynasty from the fact of individuals, bearing this name, being mentioned on their funeral tablets as deceased in the reigns of OSORTESSEN I of twelfth dynasty; an example of which may be cited the Tablet 562, Brit. Mus., of a person named Nuentef, who died in the 39th year of the reign of Osortesen I. The chief of these sarcophagi is that in the British Museum; giving, from its appearance, the highest prestige of the arts at that period. The eyes are inlaid with obsidian and ivory in bronze lid. The upper part of the body is richly gilded; and represents a vulture, or hawk, overshadowing the form with its wings. On the body are two lines—two speeches from the Osiris-mythos, or drama, (Trans. Roy. Soc. Liter. vol. II. Pl. xiii.) "*King NUENTEF deceased—we place thy arms as Osiris, we accord thee a good embalment, and thy heart to be in thy belly. Say Isis and Nephthys.*" Again, on the foot is another speech, "*Say Isis and Nephthys; We come to unite thy limbs for thee, O King NUENTEF declared true!*" Here is at least the key to the old Osiris-mythos of the scattering of the limbs of Osiris, and his destruction by Seth—a legend as old as the eleventh line or dynasty: but should any doubt exist on this point, I can cite two other coffins of the same line of NUENTEF discovered at Gournah. It appears from the inscriptions on these sarcophagi, that one of the NU-ANTEFS, the NUANTEF-NAA, received his embalment at the hands of his brother NUANTEF. Both their coffins are feathered like that of the British Museum, and they bear a single line down the body. On the coffin of the NUANTEFNAA it is a dedication to certain divinities: on the other

coffin it is the address made by the so-called Solar abode or Horizon—welcoming the deceased into its bosom. On the foot of each of these is the address of Isis and Nephthys, part of the same Osiris-mythos. There is another coffin of the same epoch, with the blank space left for the name of the individual, scooped out of a single tree, in the National Collections. It contains an ordinary sepulchral dedication; but it resembles the royal coffins from Gournah in this respect, that it has, like them, the whole of the body decorated with feathering, although of course of a more ordinary description. These are all in the usual mummied form, with the usual head-dress; and are apparently the inner coffins: for, from the pyramidal epoch the mummies were deposited in an inner case, which was, in its turn, enshrined in an outer coffin or chest. The examination of the interior of the coffin of the King NUANTEF by Mr. Hogarth was productive of several curious facts. It was lined or pitched with a resinous substance, remarkably fine and brilliant, apparently a precious or valuable gum. To this portion the outer linen wrappers of the king had adhered; and when detached were found inscribed with hieratic writing, on which the king is mentioned. The Museum coffin of NUANTEF is richly gilded, and is evidently the casing of a monarch, but all are identical in their art. I only know of one coffin in Europe, of the age of USR-T-ESSEN I, or of any monarch of the twelfth dynasty, viz; that in the Museum of the Sta. Caterina at Florence, (Lepsius, Ausw. Taf. x.) It is evidently an outer sarcophagus—has four upright posts at the corners—is decorated with symbolical eyes—and has five lines of hieroglyphics. I suppose Chev. Lepsius considered this coffin contained an allusion to the joint reigns of USR-T-SEN and AMENEMHE—but I must confess I do not see what relation of this sort it bears. It contains the address of the Horizon and its welcome to a deceased AMENEMHA SNAB; into whose name enters the cartouche of *Amenemha* in composition. So short and elliptical is this inscription, that it is difficult to pronounce what is intended by the two lines on the right side; but, at all events, it is referable to the twelfth dynasty, which is sufficient for my purpose here.

Under the succeeding dynasty of the SEBEKHETTS—the MENTUHETTS—and the NEFERHETTS—the outer coffins still retained the same rectangular shape, and were decorated externally with symbolical eyes, and large bands of hieroglyphics—dedications to various divinities. The sides are generally covered with a species of hieratic writing; containing rituals similar to the *Todtenbuch* of Lepsius—and which probably at this period were used instead of Papyri; for I have never seen any Papyri of this age. Round the sides are usually painted the whole sepulchral equipment of the dead—his bows, arrows, quivers, shirts, wigs, mirrors, sandals, and cosmetics. They are in fact the pictorial portmanteau of an Egyptian gentleman, twenty centuries before our era, as well as a bill of fare—his ducks—geese—haunches—shoulders—chops—bread—cakes—biscuits—flour—his drinks—water—beer—wine, white, northern, or Maræotic—his salt—and pastiles, are detailed at the head of these coffins. In art they are excellent, but somewhat archaic; more so than the later coffins of the eighteenth and twenty-sixth dynasties: but the great test is the formulæ which are distinguished by the elliptical turns

of expression. On certain tablets of the twelfth dynasty, these same bills of fare are found; and the stone revetment of the brick Pyramid at Dashoor had also the same.

The most important of these coffins are two in the British Museum—one in Berlin, figured in the title-page of S. Passalacqua's catalogue; and one published by Giovanni D'Athanasii, now at St. Petersburg, and another dated in the reign of SEBEKEMSAP, at Leyden. There is every reason for supposing that the SEBEKHEPTS arose towards the close of the twelfth line. On the tablet, dated in the reign of the two last monarchs of the twelfth, in the Louvre, are mentioned two individuals, one named *Uss-t-sn*, the other *Sebekhept* (*Lepsius*, Ausw. Taf. x.)—A tablet (*Sharpe. Eg. Inscr. Pl.* 104,) of a person named *Sebekhept* is also dated in the reign of AMENEMHA II. But the most decisive document is the inscription lately published by M. De Rougé, in the *Revue Archéologique*, September, 1848, of *Ausnab*, a military officer, who, under one of the SEBEKHEPTS records, *that he was about to repair the Port of AMENEMHA III*, then stated to be deceased. From which I would infer, that the SEBEKHEPTS were successors of the AMENEMHAS. The mummies found in these rectangular sarcophagi are, according to Passalacqua, *Æthiopians*. They are scarcely more than salted, readily drop to pieces, and have not, that I am aware, been removed to Europe. Of the period subsequent to the twelfth dynasty, are t. o. coffins, one an outer case, and another in the Museum of Belfast, a lithographical plate of which has been published by Dr. Hincks. This is of a person named *Tes-mut-heri*, who traces her descent in the following lineage:—

Harsiesi (priest of Amen)

Auf naa wa (military chief and sacred scribe)

Ra-ma-tu (priest of Munt, and sacred scribe, priest of Amen-ra in Thebes.)

Ta-mut-sheer (her mother.)

Tes-mut-her.

As AUFNAAWA and RAMATU are also the names of two kings, the first mentioned in the Turin Papyrus, and supposed by Chev. Lepsius to be a successor of the twelfth, while RAMATU is the prenominal of the last king of that line, Dr. Hincks contends that AUFNAAWA was a predecessor and not a successor of the twelfth dynasty. The outer coffin of this individual contained only two deeply cut lines of hieroglyphics, the commencement of the 54th and 56th chapters of the ritual: "*Oh Atum! give thou me the sweet breath* (which proceeds out) *of thy nostrils.*" This shows the Ritual to have been compiled from documents as old as the twelfth dynasty; and that it is not so recent as some have conjectured. The interior case of this mummy was painted with the representation of seven divinities who confer the usual benefits on the deceased. At this epoch, then, the mummy cases were decorated with various deities in compartments—a style which, as will be subsequently seen, prevailed till the very close of the Egyptian monarchy. The coffin, in the collection of the British Museum, which much resembles that of Belfast, is an outer sarcophagus, cut in deep hieroglyphics, and in a plain style. It is of *Nas-baenteta*, a priest of Munt-ra, son of *Pankhi*; and has down the front the 26th chapter of the ritual—that of how every one offers his heart in Kar-neter, or Hades. Round

the sides is the 26th chapter, which has been partly translated by Dr. Hincks. It contains peculiar dogma, connected with the Orphic cosmogony—"I," it says, "am the egg of the great cackler. I have protected the great egg laid by Seb in the world: I grow, it grows in turn: I live, it lives in turn: I breathe, it breathes in turn." This chapter, of a mystical import not easily explained—referring probably in its internal meaning to the performance of certain moral duties—is peculiar to the coffins of this epoch: at a later period it does not appear. No inner case, or mummy, is in the Museum collections belonging to this case, so that there are no means of determining what processes were adopted at this period. The scarabæus of the King SEBEKEMSAF, which is in the British Museum, shows that at this epoch these amulets were placed on the heart of the dead—it contains the usual formula (Ch. 30, Taf. xvi. Lepsius Todtenbuch,) which is ordered to be engraved and placed on the heart of the deceased; and the reason was this, the scarabæus expresses the idea of *transformation* or *transmigration* (kheper), and alludes to those which the deceased was called upon to perform before he could offer his heart. It is another proof of the high antiquity of the Ritual and its doctrines. To this period I would also attribute the commencement of the use of sepulchral vases, (miscalled *Cynopic*,) which are in the form of the four Genii of the dead; who presided over the four quarters of the Compass, N. S. E. and W., as at Medinet-Haboo; and in which were deposited the viscera separately embalmed;—scattered as it were through the world.

II. From the Eighteenth to Twenty-sixth Dynasty.

I cannot, at this particular moment, recall any coffins, that I would refer decidedly to the commencement of the eighteenth dyn., *i.e.*, I do not know any dated, either in the reign of AMOSIS, or of his successor AMENOPHIS I.; yet it cannot be supposed that no coffins exist of this period, when the best hypogæes of Thebes and Abydos were executed, and when many of the finest tablets in the museums of Europe were sculptured. Perhaps to the early period of this dynasty is to be referred a rectangular sarcophagus of a person named *Amenophis*, whose name has been inserted into a blank space, as if ready made. It is of sycamore, rudely sculptured with lines of hieroglyphics, in deep blue upon white ground, containing dedications to certain deities. The name and shape suggest that it may be an outer coffin of this period, for the square chest is found as late as ТАВРАКА. Another coffin, at Turin, on which a deceased *Tehamen* is represented adoring the family of AMENOPHIS I., is also probably of the same period, as the family details there given are incompatible with the notion of its being merely the last narrow home of a priest of AMENOPHIS I. On a coffin of a mummy unrolled at Jersey, the name of AMENOPHIS III. is inscribed; and also on a fragment of another in Mr. Sam's Collection, where the king is represented as a sphinx. On another coffin, in the British Museum, the deceased is represented worshipping this monarch. The question about these sarcophagi and coffins is, whether they are contemporaneous with individuals who

died under these monarchs, or of local priests attached to the worship of this monarch at a subsequent period. The probability is, that they are the inner coffins of individuals who lived about the commencement of the eighteenth dynasty. They differ considerably in style from the coffins of their predecessors. Till the close of the twelfth, Divinities rarely appear in the tombs or on the sarcophagi; they are mentioned, and are figured in the public tablets and exvotos, but rarely on sepulchral monuments. At the commencement of the eighteenth dynasty, however, the religious system of Idolatry had attained a full development—all the Gods are represented. It is impossible, however, to give here all the varieties of representations which characterize the eighteenth dynasty, as much depended on circumstances with which we are at present so unacquainted, that they appear almost caprice. There are, however, some general rules as to style, which are important as distinguishing this epoch. The mummy cases are principally of sycamore, colored with a white back-ground, and divided by bands into divisions, in which are figured various sepulchral divinities, painted in appropriate colors, for which especial directions are given in the rubrics of the chapters in the ritual, (*Todtenbuch.*) These bands cross at right angles, and are intended as a pictorial representation of the external swathings of the dead, and are covered with hieroglyphics. On the chest is *Nutpe* or *Menpe*, the Firmament, the mother of Osiris, and the inscriptions never fail to record an address to this goddess. Round the chests are occasionally representations of the regions through which the Sun passes. There are occasionally adorations to local deities, such as the Bull of *Phtha Socharis*, and the Cow of *Athor*. Unfortunately, the Arabs have played such tricks with mummies, and so changed the original tenants of the tomb, that it is not possible to know whether the various mummies belong to their respective sarcophagi, unless there are corroborative circumstances, and inscriptions on the cartonages or bandages. A box for holding sepulchral figures, dated in the reign of AMENOPHIS I., belonging to Mr. Curzon, shews that the custom of depositing them had commenced as early as this period.

Several memorials exist of the sepultures of the middle period of the eighteenth dynasty, such as the sarcophagus of AMENOPHIS III. still existing in his tomb---but unpublished---and the sarcophagus of one of his successors, the so called Sk'hai, in the shape of a rectangular granite chest, having at the corners the female deities *Isis*, *Nephthys*, *Selk* and *Suti*; the inscriptions are prayers to *Nutpe*, and other female deities. There is a mummy in the British Museum of a person named *Har em hebi*, which is possibly of the age of HORUS: it is covered with a cartonnage or linen case laid over the bandages, colored blue and gilded---containing the Judgment Scene, and other sepulchral deities. Another coffin of a person named *Ten-en-Amen*, also in the same collection, may possibly be referred to the age of the eighteenth dynasty: still the memorials of this age are comparatively few. At this period the dead were provided with Rituals or Funeral Papyri. The black bituminous process probably commenced at this period, when foreign conquests had opened Palestine, and Mesopotamia to Egypt, and unfolded

their mineral pitch, and the spices, and condiments of Assyria and India. Yet it is remarkable that while numerous tombs of this epoch remain, the mummies have totally disappeared, nor can half-a-dozen, dated in the reigns of the monarchs of the eighteenth dynasty, be pointed out in the Museums of Europe; the sarcophagi of the monarchs of the eighteenth dynasty, were decorated with representations of the Sun-mythos—the passage of the Sun through the twelve hours of the day, and those of the night. The Sun passes in a Bark always accompanied by *seven* deities who differ according to the hour, and who appear to represent the moon and planetary system. This, which forms a clue to the mythology of the eighteenth and nineteenth dynasties, shows that at this period the twelve great Gods of Egypt, were the personifications of the Sun in the respective hours, and those of the twelve hours of night the lesser Gods. At each hour the sun assumes a new type in the Pantheon: he is *Horus* in the early hours of dawn; *Ra* at midday; and *Atum* at sunset. That bitumen was used at this period is obvious from the following consideration; the wooden figures of the tomb of *SETHOS I.* are coated with this substance, and it is fair to conjecture that it was then used in embalming. The earliest figures I have seen of the sepulchral kind are of the age of *AMENOPHIS III.*, and the use of these little figures, which has not been explained, appears to be in connection with the idea of the human victims which in primæval times were offered alike by Greeks—by Chinese—by Germans—and by Egyptians, at the tombs of their ancestors, and for which the progress of civilization substituted images. The figures all contain one formula borrowed from the sepulchral Ritual (*Lepsius Todt.*, c. 6, Taf. ii.); “Let all that the deceased has done,” it says, “bereckoned and told—how he has dug the fields—sown the fields—watered from the wells—and brought the grain of the West to the East.” This seems to show that these wooden dolls were the mimic husbandmen of the Elysian fields or Hades, and were intended to aid the deceased in his labors there.

Of the succeeding dynasty—the nineteenth—*i.e.*, till the age of the successors of *RAMESES MIAMUN*, dated memorials are equally scarce; one of the most important is the mummy at Leeds, dated in the reign of *RAMESES IV.*; an elaborate description of which has been published by Mr. W. Osburn, Jun. Unfortunately I have been unable to procure a sight of this dissertation, and I am consequently unable to pronounce on the tenor of the inscription. From some hieroglyphics, &c., communicated by Mr. Osburn to me, it appears to have been most elaborately painted, probably like the coffin of *Hor* the incense bearer of *Amen-Chnumis*, in the British Museum; for the use of the Jackal in the sense of Son upon that coffin, fixes it to that period. One peculiarity appears at this age—the use of stamped leather bandages, having on the stamped portion the names, and titles, or figures, of the Monarch, a custom which prevailed till the twenty-second dynasty;—as similar bandages of *OSORKON, I.* and *II.*, and of *RAMENKHEPER* the Son of *PAISHEM*, king of the twenty-first dynasty, are in the Louvre; but there are few mummies, comparatively, even of this epoch, and most are to be referred to the twenty-sixth dynasty, and subsequent rulers.

But of the epoch of the twenty-seventh dynasty, there are undoubtedly

several mummies (most of the green basalt sarcophagi are of this age,) in the national collection. In the museum at Florence, is the outer and inner coffin of a nurse of a princess of the house of TAHRAGA; and in the British Museum, are the outer and inner coffins, and cartonages, of a judge of the Palace of the queen AMENERTAS, the head of the twenty-sixth dynasty. These coffins are peculiar: the style is coarse and indifferent, the inner coffins have the usual representations, the hawk of Numm—the Judgment Scene, with variations in the Hall of Osiris—and the various sepulchral deities. The back-grounds are generally of a bright yellow—the hieroglyphics linear and boldly executed. At the foot of the cartouge, *Apis* is represented bearing off the mummy of the deceased; the body is wrapped in bandages, the outermost dyed salmon-color, in the carthamus tinctures, and the blue networks of bugles representing the reticulated dress of Osiris; the chapter of the great egg has disappeared, and in its place the seventy-second chapter of the Ritual (Lepsius, Todtenbuch, taf. xxvii., c. 72,) is substituted: “The chapter of departing from the daylight, and passing through the.....(mah.)” The subject of this chapter is as follows:—“Let this chapter be learnt while on the world, and let it be painted on his (the deceased’s) coffin. It is the chapter by which he goes out of light in all his appointed transformations, and going to his place, is not turned back; and there is given to him bread and beer, and slices of flesh from the table of Osiris. He will go to the (mah), and there is given to him corn and barley in it, and he is in it as when he was on the world, &c.” The whole or portion of this chapter will be found on several coffins of this period; such as those of *Petenesi*, (Egyptian Salon, B.M. 3,) of *Hapimen*, (B.M. 16,) and another (copied by Mr. Bonomi) found in a tomb of the Saitic dynasty. The interior of the coffin of *Hapimen*, indeed, as well as that of the sarcophagus of *Necherthebi* in the B.M., as also the external part of two other coffins of a later epoch, have the forty-second chapter of the Ritual (Lepsius, Todt., taf. xix., c. 42,)—the supposed dedication of the limbs of the body, but rather, in my opinion, the mystical description of the deceased, viz., the back of the Osirified, i.e., the deceased, is the Menpe, or Nutpe, i.e., the Firmament; his face is that of the Sun: his eyes (are those) of Athor, &c.: his fingers and nails are living Uraei, i.e., in the shape of living serpents. The inner cases of this, and of a succeeding period, are rudely painted on a white ground; in it are the Hawk of the Sun, the Scarabæus of *Numra*, the Judgment Scene, (the vignette of the 89 ch., Lepsius, Todtenbuch, taf. xxxiii.,) that of uniting the soul to its body, the deities *Sate-Selk*. The mummies of this and the subsequent period (for this, or a similar style, continued till the Roman Empire) are all of the black bitumenical process, and those unrolled in Europe have not produced objects of importance. Their formulæ continue nearly the same; they are provided with cartonages, beaded work, and festoons of enamel: one of the most important is that of *Nekbharheti* or *Nectabes*,—a high priest of *Amen*, in Thebes, of the same epoch as the monarch of that name,—most elaborately gilded; and with a cedar coffin, whose interior contains a zodiacal heaven, and the passage of the Sun through the twelve hours. This is the earliest zodiacal projection seen on any sarcophagus, but it was repeated at the

Roman epoch, although the reason of its appearance is far from decided.

III. Ptolemaic and Roman period to the close.

No data have yet been laid down for the determination of mummies of the *Ptolemaic* period. A mummy unrolled by Giovanni D'Athanas, at Exeter Hall, some years back, was of this period. It was covered all over with a linen shroud, on which was traced a Hieratic ritual, with vignettes. The arts, however, were rapidly ebbing away, and as those of the undertaker were never pre-eminent, they became more degraded than any other. Several tablets of this age mention that the process occupied seventy days, as stated by Herodotus. The process of gilding portions of the flesh, and of sheathing the fingers with silver plates, is probably not older than this age. About the age of Augustus a great innovation seems to have been introduced in the embalmment process; the shape of the sarcophagus was changed: it neither resembled the human form, as it had done, from the eighteenth dynasty till this period, nor the massive chests anterior to the twelfth dynasty. They consisted of flat boards over which is placed a large wooden vaulted cover, like a dish-cover, with upright square pillars at the corners. The sarcophagi of the family of Cornelius Pollius, of Thebes, represents, on the exterior, the Judgment Scenes, and in the interior the Zodiacs in Greek fashion; at the foot of the coffin is the goddess *Menpe* or *Nutpe*, the firmament; the ritualistic formula differing entirely from any yet described. The mummies at this day are not wrapped up in the human form, but made of an equal thickness all down, and covered with an external wrapper, on which usually is coarsely painted the figure of Osiris, *Nutpe*—and also the portraits of the deceased, with a legend deduced from some formulæ differing from those at the earlier epoch. Occasionally a portrait is found over the face, painted on thin plinths of cedar. Greek rites are introduced; the jaws are tied up, the mouth is covered with a plate or loaf of gold; wax ornaments are placed on the knees. To this epoch are also probably to be referred the tin plates with the solar eye placed over the flank incision. Two of the latest mummies of this class are those in the Augusteum at Dresden, which are evidently from their decorations, executed in bas-relief on their stucco coverings, as late as the time of Constantine, if not indeed a century later. At this period the body appears to have been less carefully prepared, and the quantity of bitumen used at earlier periods discontinued, and a preparation more dependent upon natron adopted. Unfortunately, little discretion or criticism has been hitherto employed in reducing the different modes to their several epochs, and identifying them.

I remain,

Dear Sir,

Yours very faithfully,

SAMUEL BIRCH.

London, 23d Dec., 18



LECTURE VIII.

The Art of Mummification, concluded.

ORIGIN OF ANIMAL WORSHIP, AND EMBALMENT.

MR. GLIDDON resumed the subject by a brief recapitulation of the heads of his previous discourses on *Mummification*, and then went on to describe how there were three classes of mummies; the first of which cost 1,250 dollars—£250; the second, 300 dollars—£60; and the third, or cheapest, twenty dollars—or £4. There was a great disparity between the cost of mummification in the two extremes of society. The dried corpse of the humble quarryman was merely saturated with natron, baked in an oven, swathed sometimes in woollen rags, and covered with palm branches and papyrus matting; while on the body of the wealthy prelate were lavished the most expensive spices and perfumes; after which it was wrapped in many hundred yards of the finest tissue, and placed in three coffins, all sculptured, painted, gilded and enamelled, with a superfluity of extravagance.

Mummies still exist, whose bandages, which in the generality of first-class bodies vary from *ten to thirty* folds, have been known to reach as many as *forty-six* folds round the corpse, containing above 1,000 yards of cloth; the weight of which exceeded forty-six pounds of *linen*—varying in texture from good calico to superfine cambric. The celebrated mummy brought from Egypt, in 1822, by the adventurous Ethiopian traveller, CAILLEAUD, on being unrolled, produced nearly 350 square yards of linen cloth! and this was not the mummy of a king, (none of which have been preserved, owing to consecutive desecrations, down to our time,) but of a *Scribe*. [CAILLEAUD, "*Voyage à Meroe*," 1823.—*Plates*, vol. ii., 66 to 71: *Text*, vol. iv., page 9:—*Greco-Egyptian Mummy of PET-EMEN*; date 2nd June, A.D. 116,—page 18.]

The great majority of mummies, however, belong to the middle class, whose cost is estimated at 300 dollars; though, when we take into consideration the little comparative cost of children's mummies, they must have fallen below that average. In order to be entirely within bounds, Mr. Gliddon assumed the average cost of preparing a mummy at twenty dollars, which, considered in connection with the population and probable annual mortality of Egypt, would give an expense for mummification of 3,330,000 dollars per annum, equivalent to £666,000 sterling.*

* In the times of DIODORUS, or B.C. 40, the population had fallen off from its former maximum of eight millions, prior to the Persian invasion and the Greek rule. Roman oppression, followed by the well-known destruction of human life during different epochs of the Saracenic, Ottoman, and Memlook dominations, reduced it still more: but even in the last century, just before NAPOLEON'S expedition, 1798—1802, and about the time when MOHAMMED ALI set his foot in Egypt, the population exceeded *three millions*, and probably approximated to *four*. His life-destroying sway, in *thirty-six* years, reduced the population of Egypt to about

The whole of this huge revenue passed into the hands of the *Priests*, who were the physicians, apothecaries, mummy-makers, undertakers, scribes, and sextons, and who besides leased out the sepulchral excavations in which the bodies were to repose.

Basing his estimate on the ingenious calculations and curious statistics of HENRY, ("L' Egypte Pharaonique," 1846, vol. ii., pages 182, 430, &c.,) Mr. Gliddon referred to the immense amount of *linen* cloth which was annually employed as an envelope for mummies. He showed several specimens of this cloth, which, he said, was once supposed to be cotton, but is now proved to be linen.* With this cloth the mummy was swathed with great care and regularity, in strips or bandages, varying from a few inches to a foot in width, which were applied with all the accuracy of modern surgery, the inequalities being filled out with pads and compresses. Of the quantity thus used the amount, as above shown, was sometimes enormous. In fact, as the Lecturer very justly remarked, everything in Egypt was on a gigantic scale, with the exception that there were no "*giants* in those days," the word "*giant*," in our Bible, being an erroneous translation of six different Hebrew words, (*Nephilim*, *Ghiborim*, *Emim*, *Rephaim*, *Anakim*, *Zamzumim*, &c.,) none of which in that language, however misconstrued in the versions, ever were intended to convey the idea of men of outrageous or impossible stature. On the contrary, the Egyptians, as a people, were under our average size, being less than five feet six inches in height. The length of life in Egypt, even in days long before Abraham, being the same as our own, (proved by innumerable sepulchral tablets, the reigns of kings, and the *skulls* of the mummies,) it is presumed that the Nilotic population renewed itself once in thirty-three years, which would give an average daily mortality of 274 persons, adults and infants of all grades of society.

Admitting, for the wrappers of each individual, a mean of three yards *square*, certainly by far too low an estimate during the flourishing period of

1,700,000, when I left Egypt in 1841 :—(Cf. my "*Memoir on the Cotton*," pages 9^t 26, 27, 39, 40 ; and "*Appeal to the Antiquaries*," 1841, pages 21 to 24, 148 to 156.)

Let not the reader suppose that, since 1841, to this very hour, matters have improved ; or that, without a *radical change*, they are likely to do so. I can still boast of some staunch allies in the valley of the Nile, and have *positive information* that great deterioration has since taken place.—G.R.G.

* In other lectures, devoted to the consideration of all the ARTS and SCIENCES of the Pharaonic days of Egypt, the question, so long debated between Continental and British archaeologists, as to whether the cloth found on the mummies be *cotton* or *linen*, either or both, has frequently been discussed by me : and after the exposition of the learned but inconclusive arguments of ROSELLINI and CHAMPOLLION-FIGEAC in defence of cotton, I have set forth how the practical application of the *microscope* by English science has settled the controversy in favor of *linen*. While I would beg leave to add to the erudite author's remarks (sections 8, 9, pages 21 to 26), that *two*, if not three, varieties of *sheep*, were very abundant at the remote age of the fourth dyn. (Tomb of EIMER, *architect* of Great Pyramid ; apart from the multitude of coetaneous sepulchres opened in 1842-3, by LEPSIUS, at Gheezeh ;) no less than that *wool* composed the funereal cerements of the earliest mummies, long before *linen* was used for this purpose (see Mummy of MENKERA, *guardians* of Toorah, &c. &c.) ; the reader will find the subject admirably elucidated, under the head of *Flax*, in YATES, ("*Texterium Antiquorum* ; an Account of the Art of Weaving among the Ancients," London, 1843, book ii., pages 253 to 129.)—G.R.G.

the eighteenth to the twenty-second dynasties, we find that 2,466 yards *square* per diem, or 900,390 yards *square* per annum, of linen cloth, disappeared into the tombs for the shrouding of the dead.

Valuing this cloth at an average price of 25 cents, (one shilling sterling) for fine and coarse qualities, the annual expenditure of the population of Egypt for the cloth consumed in embalming, must have been at the rate of 225,096 dollars, say £45,000 sterling. But the probability is in favor of nine times that amount, if each *square yard* of cloth be valued at *one* shilling, equivalent to £405,000 sterling per annum.

Whatever it may have been, the whole of the revenue from this immense consumption of cloth was also received by the *priesthood*, or "Sacerdotal *Caste*,"* who held the monopoly of the linen cloth used in making mummies.

* Among countless Grecian fables about Pharaonic institutions still current as indisputable in European literature, there are few more dangerous than that the social system of the Egyptians was always divided into *Castes*; and that each profession, or trade, was hereditary, and passed from father to son, in *hereditary* succession, by stringent laws that precluded, under severe penalties, any deviation from the observance of this custom. This doctrine was particularly maintained by the Indianists; who, because (until the historical criticism of *Sanscrit* literature has been recently undertaken by the SCHLEGELS, BORPPS, BURNOUTS, LASSENS, PAUTHIERS, HUMBOELTS, PRINSEPS, WILSONS, &c. &c.) they seem to have known very little about the early history of Hindostan, claimed nevertheless to be acquainted with everything relative to that of *Egypt*. Especial care was taken by me (*Chapters*, 1843; pages 47, 48;) to disclaim, in behalf of the denizens of the Nile, the practice of any of the *caste* rigidities to this day observed by those of the Ganges.

This distinction among Hindostanic *Castes* appears to proceed from an aboriginal and physical diversity in the cuticular *color* of the four great classes into which Hindoo society is divided; viz., the BRAHMANS, KSHATRIYAS, VYASAS, and SOUDRAS; corresponding to our words, *Priests*, *Warriors*, *Trades-people*, and *Servants*: (PAUTHIER, "Livres Sacrés de l'Orient," 1840. *Introduction*, page 22; and *Lois de MANOU*, Book i., Sloka 87—91: see also MUNK, "Réflexions sur le Culte des Anciens Hébreux," in CAHEN's "Bible, Traduction Nouvelle," 1833, vol. iv., p. 57 to 78; for similarities between the laws ascribed to MOSES and to MANOU.) The Sanscrit word *Varna*, indigenous name for "Caste," means simply, *color*; and its adoption in India is one of the multitude of proofs that different races of the human family, distinct "ab initio" from each other, now occupy that vast Peninsula, in the respective relationships of the conquerors and the conquered.

The existence of similar *Castes* in Pharaonic Egypt, rejected long ago for the same monumental reasons by Mr. BIRCH, has been overthrown irretrievably by AMPERE, equally versed in hieroglyphical as in Sanscrit sciences: ("Revue des deux Mondes," 15th Sept. 1848.) It is therein demonstrated, from the *funereal tablets* and other monuments, that, in Egypt, nobles and people, intermarried freely into each other's families: that military, or civil functions, were not necessarily *hereditary*:—a warrior's son being often a priest; a priest's a soldier; and in the same family, children of the same parents belong, some to the sacerdotal, others to the military orders; whilst others enter the civil service, or follow trades and professions.

Eight years ago, in refuting a few of the misstatements of the "Report on Egypt and Candia," by JOHN BOWRING, presented to both Houses of Parliament, by command of Her Majesty: London, 1841:—"a document which, considering its enormous cost, and the number of parties from whom "tant bien que mal" information was derived, contains more fallacies on Egypt than any work yet printed in the same number of pages:—I pointed out ("Memoir on the Cotton," 1841, page 43,) the egregious absurdity of the assertion, that "tilling the soil is in Egypt a degradation of *caste* as strong as any that exists in India;" (*Report*, page 461:) and as the error of the application of this term to *modern* Egyptian habits may proceed

They owned the land on which the flax was raised ; it was manufactured in the vast enclosures around their temples, and their women were the operatives engaged in the manufacture. Many, if not all of the medium-class of tombs, as is known from Greek papyri, were also the property of the priesthood ; and, inasmuch as each family paid a rent or tribute to secure a resting-place for the remains of its ancestors, hence resulted to the Egyptian priests another fertile source of income. Mr. Gliddon here mentioned a singular law among the Egyptians, by which a debtor was obliged to give the mummies of his ancestors in pledge for the payment of his debts. If he died insolvent, the next heirs and blood relations became responsible, being bound in honor and in law to redeem the pledged mummies.

from an equivoque, I now subjoin AMPERE's etymological definition of the word *Caste*:—"Ce mot vient du portugais *casta*, qui signifie *nille, lignée, lignage*. Auparavant, *caste* n'est pas le seul terme employé pour désigner quelques particularités des sociétés de l'Orient qui dérive du portugais. *Mahomet* et *les Arabes* veulent dire en cette langue l'un *magistrat*, l'autre *danseuse*. Ceux qui, en employant ces expressions, croiraient faire de la couleur locale, doivent renoncer à la satisfaction de se servir en français (or, in *English*) d'un mot chinois ou d'un mot indien. Tout ce qu'ils peuvent espérer, c'est de montrer que, s'ils ignorent les langues orientales, ils ne connaissent pas mieux les *langues de l'Europe*;" (page 841 : *vide* also AMPERE, "Epopée Indienne," in the same Journal, 15th Sept. 1847, page 1046, *note*.)

The phrase "Sacerdotal Caste" reminds me of an anecdote which, on the receipt at New Orleans of the electrifying news of the French Revolution of 22nd February, I had the pleasure of communicating to my friend Mr. HARRY, Editor of the "New Orleans Daily Bee." It was published with other Parisian reminiscences, under the caption of "Premonitory Symptoms of the Victory achieved at Paris on Washington's Birth-day."

* * * * *

"Describing impressions on his second visit to Paris in 1845-6, Mr. * * * * *, whose objects being purely scientific, was thrown much into social intercourse with some of the highest scholars and profoundest thinkers of the day, remarked around him a vague feeling of disquietude ; a doubt as to the durability, not only of a given ministry, but of the entire fabric of Government itself. Every man who had 'fait sa carrière' through the prior vicissitudes of Revolution, Empire, Restoration, Carlism, July and *Louis Philippisme*, appeared to be buckling on his armour to meet some undefinable change : while the younger men of sterling science, who were aspiring to distinction, hesitated to bask in the sunshine of royalty—all parties seemed striving to become identified with the *Nation*, rather than with the King's household or his favorite Ministers. This nervousness of feeling had arisen some time before, and had acquired great vehemence, when the educated Frenchmen of the day suddenly awakened to the conviction, that *LOUIS PHILIPPE's* (and Madame Adelaide's) evident leaning towards the *Jesuit* interest, was gradually replacing juvenile tuition, and especially female culture, under the quiet but insidious control of this vast engine of priestly domination.

"True to herself, France met the impending danger from the tribune, and through the press—in the lecture-rooms of her Colleges, and in the *salons* of citizen-life. *EUGENE SUE's* 'Juif Errant,' read with avidity by all classes, exposed the principles of those whose text-book is the 'Secreta Monita.' *QUINET* and *MICHELLET*, professors at the Collège de France, in their public lectures on French History and Political Economy, when they painted the *Jesuitism* of times past, dexterously coupled it with times present, to the delight of thronging auditors ; until the fears of the King becoming worked upon by the 'directeurs de conscience,' a Minister received orders to send for *LETRONNE*, who, to the elevated office of 'Garde Général des Archives,' and a name world-renowned as the chief archæologist, first Hellenist, and among the foremost Egyptologists of Paris, adds the dignified title

This revenue was, of course, independent of that accruing to the "Sacerdotal Caste" from their possession of *one third* of the land, exempt from imposts. Besides, each temple had its own grounds, and other vested property, providing comfortably for the maintenance of the priests and their families. (DIDORUS I., 73 : HERODOTUS, II., 37.)

From these facts we may derive the true reason why the practice of mummification was so long preserved in Egypt, for more than 3,000 years, as explained in the preceding lecture.* It was one of the principal of many sources of income derived by a pampered hierarchy from the people : and

of 'Administrateur du Collège de France.' At that moment, also, his name stood highest on the list for the next nomination to the peerage.

"A sharp discussion ensued. The Minister ordered the Administrator to silence QUINET and MICHELET ; hinting at the forfeiture of the promised peerage as an alternative. The latter firmly refused to interfere ; maintaining, that it was the ministerial prerogative to appoint to each professorship an incumbent of their own selection ; but that after crossing the threshold of the College, each professor was free by the Constitution of this University to lecture as best pleased him—a matter, added the Administrator, of small moment to the Government ; because, if a given professor discoursed nonsense, no one would go and hear him ; and if he developed science, knowledge would thereby be diffused. In either contingency, no one had the power to impose silence on him.

"The Administrator and the Minister parted in anger, when the former argued the impossibility of preventing a given lecturer from alluding to topics irrelevant to His Majesty's theories ; and, by way of exemplification, M. LEBRONNÉ, in his refusal with a threat to the following significant effect : 'You know, M. le Ministre, that for twelve years I have delivered a "Cours d' Archéologie Egyptienne" at our College. Nothing, certainly, can be more remote from modern politics, or from allusions to *Jesuitisme*, than Egyptian hieroglyphics. Now, I warn you, if you persist in molesting QUINET and MICHELET—if you will not let us alone at the Collège de France—that my own Course next winter shall be devoted to the "Sacerdotal Caste" of ancient Egypt. I will never use the word "Prêtre," lest I might offend ; but, adhering simply to an exposition of the avaricious practices, cramping system, and political intrigues of that long-buried hierarchy, it will not be my fault if any of my auditors should draw 'odious comparisons' between them and that which may be going on around us.'

"The peerage was lost, but the professors maintained their posts. MICHELET's death removed one obnoxious member of the faculty ; but his "Prêtre et la famille" was a patriotic legacy that aided in sweeping the Jesuits for ever from the soil of enlightened France. Switzerland has followed suit ; Italy is on the road. In 1846, a ludicrous attempt at re-action was tried through the introduction of the erudite archæologist, if bigoted man, LENORMANT, into the College. His first lecture hurled an anathema on freedom of inquiry—he stigmatized his opponents as "vermine !" Gendarmerie in disguise failing to suppress the tumultuous students (who attended his prelections in white night caps, and snored enveloped in blankets,) LENORMANT resigned after the third lecture. 'Ex uno disce omnes.'—*The New Orleans Daily Bee*, Wednesday Morning, March 29, 1848.—G.R.G.

* On recurring again to the extreme length, if undefinable remoteness of the ages which preceded all *monumental* epochas in Egypt, I am quite aware that it will take much time, and more polemical disputation, before the general principles herein contended for will be popularly admitted. I have read probably all, and possess most, of the *Reviews*, published in the last three years, of Chev. BUNSEN's erudite work, "*Aegyptens Stelle in der Weltgeschichte* ;" not more than four of which are written by critics at all "posted" in Egyptology, and consequently are of no importance in the development of these studies ; while some of these critiques are characterized by an "odium theologicum" beneath the notice of the man of science.

we can, therefore, readily understand that such interested parties would labor to form and sustain a creed which should teach the other classes to look upon the embalming of the body in this world, as the only method of obtaining salvation for the soul in celestial *Amenthi*.

Having thus laid before his auditors the original or primary causes of *human* embalment in the valley of Egypt, with a sketch of the reasons which periodically increased, and the motives that perpetuated the custom, the remainder of Mr. Gliddon's lecture was devoted to the consideration of *animal* worship, as connected with *animal* embalment among the Pharaonic Egyptians.

Among the multitude of accusatory charges made against this ancient people for their superstitions, heathenism, idolatry, and what not, that of the worship of *Animals*, has ever been reputed, the "maximum pessimum,"—the greatest worst,—the one which the invidious enemies of their antique civiliza-

Happening to be one of many embarked on the same ocean of inquiry as the profound scholar above named; and, whilst differing in minor details, to take the same broad views of the ante-chronological periods of the world's history, I have amused myself, when perusing the arguments put forward by our antagonists, by marking, with pencil on the margin of their papers, their singularly-naïve admissions as to the vagueness and feeble basis of all biblical chronology. These marked paragraphs already form quite a respectable volume, from which space herein limits me to one quotation; the more honourable to its author, as, if the general tone of the criticism be unworthy of his scholarship, the objections betray a hand thoroughly practised in hieroglyphical arcana.

"We by no means adopt this low view of the historical element in the Bible; but we are not prepared to denounce the man who does so as an infidel; and to plead a sort of *præscriptio contra infideles*, as a reason for not examining into the truth of his statements—nay, we will go farther. We are not prepared to say that it may not be possible to strike out a sound mean between the views of our author (Chev. BUNSEN) and those generally entertained by Protestants in this country, (*Ireland?*) which perhaps err in the other extreme. This is not the place for discussing the subject; nor, if it were, would it be proper to enter upon it at the close of an article. We would, however, throw it out for the consideration of our divines, whether there be not some ground for the charge of *Bibliolatry*, which is brought against the Protestants of the United Kingdom by the continental (and *American*) Christians, almost without exception; and whether there be not grounds for apprehension, lest the overdrawn statements commonly made at popular meetings, respecting the Bible—statements which are not warranted by anything in the book itself, and which were never made dogmatically by any of the early Fathers, or by any of the great divines of the Reformation—may lead, at no distant period, to a fearful reaction."

"We merely throw this out as a hint for the consideration of our divines;" &c. (ANON., "Egypt and the Bible;"—*Dublin University Magazine*, No. 190, vol. xxxii., October, 1848; pages 387, 388.)

This ingenuous writer had perhaps before him the cogent remarks of PHILE-LEUTHERUS ANGLICANUS:—

"But those who advocate the free use of philology in the interpretation of the Scriptures, find their fiercest and most uncompromising opponents in the ranks of those who are slaves to the Puritanical *Bibliolatry*, so common in this country. According to this school, every word in the canonical books of the Old and New Testament proceeds from a divine and miraculous inspiration:" (page 43.) . . . "By those who believe in the plenary and verbal inspiration of the Scriptures, science in general, and philological science in particular, are viewed with distrust, if not with abhorrence; and the more so, if this *bibliolatry* is combined with a certain amount of *ecclesiolatry*," &c.: (page 44; "A Vindication of Protestant Principles," 1847.)—G.R.G.

tion have put forward with the greatest pertinacity, united with the most triumphant and derisive scorn: even without drawing a parallel fairly, between the physically-harmless "abominations of the Egyptians," and those atrocities which hundreds of texts in *Hebrew* annals attest to have been quite common in Palestine in the self-same days. It cannot, therefore, but be agreeable to our readers to have a synopsis of the Lecturer's views on the rationalism of these strange rites and mystified practices.

After exhibiting the mummied animals upon his table, and pointing out a variety of plates and tableaux suspended on the wall, Mr. Gliddon proceeded to consider the rationale of *animal-worship*. He conceded freely that when the Greeks first became acquainted with Egypt, in the fifth or perhaps the sixth century, B.C., the worship of animals had become the main feature of the popular faith. Reference was made to the story of the Roman soldier who was immolated by an Alexandrian mob, because he had thoughtlessly killed a *holy cat*; as well as to the disgust expressed by JUVENAL at the Onion-deity of the Egyptian vulgar in his day. Passages from the Fathers were quoted which manifest their horror at the practice, and their total ignorance of its nature; none, with the exception perhaps of CLEMENS ALEXANDRINUS, whose knowledge was very limited, possessing the slightest acquaintance with the Egyptian tongue or writings, nor with Pharaonic doctrines or institutions. At the Ptolemaic and Roman epochs, however, there was no superstition too grovelling for the degraded sons of the once noble Pharaohs. But any one who studies the "land of Ham" monumentally, will perceive that this state of moral degradation vanishes as he recedes toward more ancient times. In the decrepitude of her second childhood, Egypt was a very different thing from what she had been more than 3,000 years before, when animal worship was still unknown, or in its commencement. Nor is it historically just to predicate what may have been the usages of the denizens of the Nile during the early pyramidal period, from the corrupt state of the people about and after the Christian era. We are, indeed, told by MANETHO, the only credible annalist of those primitive ages, that the "Bulls, *Apis* and *Mnevis*," and the "Goat *Mendes*" were first "appointed to be *Gods*" during the second dynasty: (MANETHO, apud CORY, "Ancient Fragments," page 98:)—a proof that this chronicler did not consider the worship of animals to have existed in the times *before*. There is no mention in the Pentateuch of the prevalence of animal worship among the ancient Egyptians, except by implication, in the case of the golden calf; while on *animal* mummification Scripture is silent. And it is now thoroughly established, that the *representations* of divinities are far less frequent in the sculptures and paintings of the *Old Empire* than in those of the *New*. The incipient origin of the worship of animals must be sought for, like that of human embalment, in still earlier ages, the ante-monumental periods of Egyptian history.

Animal worship, the Lecturer expounded as the natural and unavoidable consequence of the misconception, by the vulgar, of these emblematical figures invented by the priests to record their own philosophical conception of abstract ideas. As the pictures and effigies suspended in early Christian churches, to commemorate a person or an event, became in time objects of worship to the vulgar, (without the adorer's being, therefore, denounced as

heretical,) so in Egypt the esoteric or spiritual meaning of the emblems was lost in the gross materialism of the beholder. This esoteric and allegorical meaning was, however, preserved by the priests, and communicated in the Mysteries alone to the initiated, while the uninstructed retained only the grosser conception.

To perpetuate the esoteric signification of these symbols to the initiated, there were established the Mysteries, of which institution we have still a trace in Free-Masonry.

He cited several instances to show how abstract ideas, in themselves pure, having, for want of an alphabet, been represented pictorially, became in course of time invested with erroneous meanings by the ignorant and lower orders, even of modern and not uncivilized nations. Among his illustrations of Nilotic Art, he indicated several beautiful designs of the "Winged Globe," and after explaining the many emblems which enter into its composition, he characterized its general meaning to be symbolico-figurative of the "*Providence of God* overshadowing the land of the Nile"—an idea which the primordial Egyptians could not represent otherwise than pictorially in the absence of an alphabet.

On this emblem the lecturer dwelled some time, showing how it is often referred to in the *Hebrew** text of Scripture: viz., in Isaiah xviii., 1; Malachi signs are as old as the Pyramids: but a strictly alphabetic writing is not found

* The perfect "Winged Globe" is an emblem of HOR-HAT, the *good genius*, and *agatho-daimon*; under the shadow of whose wings were placed the persons of the Kings, the temples of the Gods, and the funereal habitations of the departed. Its forms are various, however, and its symbols occasionally differ. In general, its composition consists of the *disk* of the Sun, RA, allegorical of physical and celestial light: surmounted by the horns of the *wavy-horned* ram, symbol of AMUN-KNUM, figurative of divine *intelligence* and *spirit*: flanked by the *wings* of MAUT, the great and beneficent *mother*, whose protecting benevolence hovered over Egypt. (I give the description as it stands in my MS. lecture, but think Mr. BIRCH's suggestion preferable; viz.: that the *wings* are the inner ones of the *Scarabæus* or "Sacred Beetle," symbol of KHEPER, the *Creator-Sun*.) From the central solar-disk depend two *royal-Asps*, URÆI, *Basilisks*, symbolical of *sovereignty*; on whose heads the *red* crown, TOSHR, and the *white* crown, WABSH, make that duplex-aspic dominion to preside over things *terrestrial* and things *celestial*. The so-called *cruces-ansate*, sacred TAUS, which hang on the serpents' necks, are emblems of LIFE, ANKH; and here typify *eternity*. It is not in human power, when, acquainted with hieroglyphics we consider the infinitude of other mythological and metaphysical combinations inherent in each of the emblems that compose its sculptured as well as painted form, to devise a more beautiful and exalted figurative embodiment of the idea of a "Protecting *Providence*," than we behold in the WINGED GLOBE of the Egyptians: to whom, indeed, it was a species of *heraldic arms*, the universal *symbol* of their *country*: (Cf. ROSELLINI, "Mont. Civili," vol. ii., pages 394 to 403:) by which, in the literal Hebrew text, the Prophet apostrophizes *Egypt*; (Isaiah, xviii., 1,) in the sentence, "Ho! Land of the winged (Globe!)"

The Israelites themselves seem to have had two "winged Globes;"—one *beneficent*, as in Malachi iv. 2:—and the other, a "fiery-WHIRLING-DISK," *maleficent*, as in Zechariah v., 1, 2: verses so utterly tortured, misconstrued, and perverted from their sublime sense, in the *versions*, that without transcribing an entire chapter of LANCÉ's works, I cannot pretend to bring their purport properly within the reader's comprehension. These recondite biblical and mystical connections, together with Hebrew symbolism in general, have been considered by me in a double Course of three Lectures delivered at Philadelphia, in September and October, 1847; portions

iv., 2; Ezekiel xxviii., 14; Zechariah v., 1, 2, and other places: but, when the ante-monumental Egyptian (5,000 or 6,000 years ago) first conceived the idea of "Providence," he had no alphabet wherewith to *write* the Coptic synonyme for P, R, O, V, I, D, E, N, C, E, as we write it now-a-days alphabetically in English.

The minds of men in primeval ages were inductively led to the abstract idea of a First Great Cause, whose attributes they defined by a metaphysical system of triads. If the primordial Egyptians had possessed an *alphabet*,* they could easily have expressed these attributes graphically by names, which in any other way of writing are attended with great difficulties.†

Now, the pure *alphabet*, i.e., strictly phonetic *letters*, disengaged from accompanying *figurative* and *symbolical* signs, is an invention that can no longer be carried back to the fifteenth century, B.C.; and is not attained to this day by the Chinese, who have written books for 4,000 years. *Phonetic*

of which, at the solicitation of friends, I have condensed into one discourse, at St. Louis, 12th May; and Pittsburgh, 29th May, 1848. When my inquiries are completed, I hope to present the results to the public in a satisfactory shape.

Meanwhile, the critical Hebraist need not be told, that our word *angel*, derived from the Latin *angelus*, transcription of the Greek *αγγελος*, messenger, is in the original Text, MeLaAK, plur. MeLaKIM, literally, a messenger: but that it is misused when the Hebrew gives a totally different word, KeRUB; plur. KeRUBim.

In general, the latter, being cognate with Arabic *carab*, "loss of the sun's rays at setting," &c., refers to the *Sun* at different stages of his diurnal course, and means also any *Star* or *Planet*: for "IeHOuah resides in the midst of the *Kerubim*,"—"mounts upon a *Kerub*, and flies"—which is the reason why they were symbolized by "*winged-fiery-disks*" upon the Ark of Israelites (as their allegorical equivalents occur on the *shrines* of Egyptian divinities) in Exodus xxxvii., 7, 8, 9.

The SeRaF, *Seraphim*, (compare Numbers xxi., 8, 9, with 2 Kings, xviii., 4,) were *Serpents*, surmounted by *Solar Disks*, like the *Uraei* of Egyptian Sculptures; while the word SeRaF, like a thousand others in Scripture, has besides a *double* meaning, apparent and occult, *splendour of fire*, and *Solar light*.

The curious can follow these philological researches in the extraordinary works of LANCÉ; and after being told, that our "moyen age" pictures of *Cherubim* and *Seraphim* originate from a misconception of the ancient Hebrew root KeRUB, which was confounded by the Rabbis with the modern *Chaldee* K-RaBe, "like unto an *infant*," the reader may bestow a smile of pity upon the current pictorial representations of *angels*, when figured as bodiless *baby-heads*, with *wings*, forsooth, placed where there are no muscles to articulate them, peering from behind their little chubby cheeks. This artistic method of adding *wings* to the human shoulders was derived, with other ideas, from Chaldaea; (see LAYARD'S, or FLANDIN'S plates of Persepolitan, Ninevite, and Babylonish Sculptures.) The *Egyptian* artists were wiser and more consistent. They attached *wings* to the arms of Divinities, by means of bracelets: but, . . . "Nunquam concessa moveri *Camarina*:" VIRGIL, *Æn.* III., 700: (Cf. PHILELEUTHERUS ANGLICANUS, "A Vindication of Protestant Principles;" London, 1847; page 21, and *Note* § 11, 4.)—G.R.G.

* "Les alphabets modernes, réduits à un petit nombre d'éléments vocaux par l'esprit d'analyse et d'abstraction, qui est le propre des sociétés avancées, ne peuvent pas remonter à l'âge primitif que le calcul infinitésimal;" (PAUTHER, "Science de l'Alphabet;" 1842, page 35.)

† The entire argument here turning upon a simple but great fact, the comparatively-recent invention of the *true* or purely *Alphabetical system*, I have condensed, into as succinct a form as possible, the substance of my inquiries in APPENDIX G.

until the introduction of the Demotic character, not earlier than B.C. 600, at which age it was still imperfect.*

In the effort made, everywhere and at all times, by infantine but intellectual man to record his history and to overcome space and time in the transmission of his thoughts, his apprenticed hand was at first restricted to the *pictorial* embodiment of ideas, however metaphysical. *Pictures* were therefore necessarily adopted to represent abstract, and essentially theological ideas; but for the latter object, and in Egypt especially, they were made so distinct and so impossible in real life, as palpably to designate their figurative character. The heads of birds, reptiles, and of beasts, were added to human bodies, and *vice versa*; and appropriate significant colors were used to paint them; each creature selected having an affinity, real, or supposed, in its nature, its name, (which sometimes was the *onomatopoe* of its cry,) or other cause, to that particular attribute of Divinity, its pictorial embodiment or delineation was intended to portray. Thus, for example, the lecturer pointed out on his tableaux the *God*, AMON-CHNOUPHIS. AMUN-KNEPH is represented on the monuments of a blue color, and with a *ram's* head on a human body. Blue is the colour of the celestial ether. The ram is remarkable for the strength and massive osteology of his forehead, and Egyptian philosophy placed the intellect in the frontal region. This combination was fitted to express the God AMUN-KNEPH: Amun signifying stability, truth, and intelligence, (whence our *Amen*), and Kneph, spirit; both together being the *divine intelligent spirit*. In like manner, *divine watchfulness*, vigilance, or guardianship, was typified by the head of a *jackal* on a human body, or the God ANUBIS. Jackals are notoriously the most restless and vigilant of Egyptian animals; and in hieroglyphics are likewise symbolical of the word *Priest*; serving to emblemize his "*watchfulness* over sacred things:" (CHAMPOLLION'S Dictionary, in loc.) A *hawk* with a human head meant the *Soul* or disembodied spirit, and so on.

The first step in the deterioration of this system commenced when the picture of the animal which had been originally selected, in whole or in part, to symbolize a divine attribute, began to be regarded as sacred by the vulgar. The *jackal* became an object of reverence, because his head was used to express pictorially the vigilance of Anubis. Motives of piety thus consecrating the picture of the animal, *living* jackals were thenceforward preserved at public expense in the temples, as holy emblems of that attribute of Deity which we term "divine watchfulness." This, at first perhaps a vulgar misconception disavowed by the Priests, was too profitable a source of advantage to the hierarchy not to be soon winked at, and in time completely acceded to. More sanctuaries with larger enclosures were required, and better salaries for the jackals' keepers.

We thus arrived at that philosophical point of view, when we behold the antique Egyptian, in ages anterior to the pyramids, striving to express his

* Unwilling to trust to my own definition of the development of *writing* among the ancient Egyptians, I solicited Mr. BIRCH'S critical opinion, and have the greatest satisfaction in referring to it under *Appendix H*, page 113, *infra*.

devout recognition of such an attribute as "divine *watchfulness*" in his metaphysical conception of a Great First Cause, compelled by the absence (from its non-invention) of any *alphabet*, to trace the allegorical picture of a *jackal's* head on a *human* body : and we have seen how an emblem so compounded eventually led to the worship of the *living* jackal.

There was no more of feteichism, paganism or heathenism, in man's first conception, or primitive deed, than when we ourselves *write* the words "divine watchfulness" in *alphabetical* letters. Primeval man could not help it. He did his best to spiritualize ; his first ideas were abstract, his conceptions lofty, his intentions pure. The compulsory materialism of the means did not then derogate from the spirituality of the *symbol*, nor from the beauty of the metaphor. But it was impossible for the many to comprehend these abstractions. Their true signification being restricted to *the few*, the type was soon forgotten in the sign ; and sacerdotal fraud found its temporal interests too well promoted to divulge, to any but the *initiated*, who likewise paid heavily for the privilege, the true origin and real meaning of the union of a jackal's head on a human body, in the *pictorial effigy* of the God ANUBIS.

Thence the transition to *animal* mummification was rapid and inevitable : for the time came when the sacred pet of the temple reached the term of its natural life ; i.e., when the jackal *died*.

The Egyptians, who had been led long previously, by natural causes, to embalm their *dead men* as an act of piety, allegorized into the mythe of Isis re-uniting and embalming the scattered limbs of OSIRIS, reasoned by analogy, that it must be meritorious to mummify the carcase of the departed emblem of ANUBIS ; and henceforward all *dead jackals* were collected, embalmed, and buried in appropriate catacombs ; especially in those nomes, or provinces, which, like Thebes and Lycopolis, being under the immediate protection of the divine ANUBIS, "lord of the tomb," held temples wherein his *animal* representative was peculiarly revered.

As it was with jackals, so in general terms the system gradually extended to other animals, birds, and reptiles ; some being deified or canonized for one reason, others for another ; a few being reputed *clean*, while many, from motives not yet explained, were considered *impure* ; until parts even of the vegetable creation entered into the category of things sanctified and *mummifiable*. Here the Lecturer called over, and gave brief explanations of the embalmed specimens before him ; which, in whole or part, comprised *Bulls, Rams, Jackals, Cats, Dogs, Apes, Ichneumons, Ibises, Owls, Hawks, Crocodiles, Snakes, &c., &c.* : pointing out upon his map the various localities where they were anciently held sacred, and are still found at this day in the greatest profusion.

Such was the primeval origin of Egyptian *animal* worship, the natural precursor of *animal* embalment, as deducible from the monuments and the confused narratives of classical writers :—institutions and theocratical practices which we find increasing in intensity as we come downwards in history.

The *Priests* alone derived profit from all these superstitions ; and in their sordid love of gold they communicated the true meaning of the symbols only to the initiated in hierophantic mysteries—whence the perpetual distinction between the esoteric and exoteric doctrines of the Egyptian hierarchy.

We must not judge, said the Lecturer, of this primitive philosophy as it had been in ante-monumental ages, prior to the invention of *phonetic* signs, from the abject form its religious practice eventually assumed among the people, who were the dupes of the priesthood. The ancient Egyptians were not worse than their neighbours. Joshua xxiv. 2, and Exodus vi. 3, show that the world had not been enlightened by any true views of religion prior to the days of Abraham; and we are speaking of times long anterior to that patriarch, when we discuss Egyptian *origins*.

Mr. Gliddon again referred to his previous exposition of the lofty ideas contained in the "Book of the Dead," for proofs that the *early* creed of Egypt was far simpler and more exalted than that of later Pharaonic, still more than that of Ptolemaic and Roman days: and, after a brief explanation of the origin of pictorial *divine Triads*, at the head of which, in his tableaux of hieroglyphical mythology, we were shown AMOUN the *Father*, MAUT the *Mother*, and KHONS the *infant Son*, he concluded (says the *St. Louis New Era*) this interesting prelection by reading a sublime definition of the God-head, under the Hindoo name of BRAHMA, from PAUTHIER'S French translation of the *Vedas*. ("Livres Sacrés de l'Orient;" *Panthéon Littéraire*, 1840, KENA-UPANICHAD of the *Sama-Veda*—Introduct., page 18.)*

APPENDIX G.

I have hazarded the assertion, that the existence of a pure *Alphabet*; i.e. *letters* like our A. B. C. D. — can no longer be carried, by the archæologist familiar with hieroglyphical discoveries, with the results of continental criticism of ancient monuments and literature, and with Scriptural *exegesis*, back to the fifteenth century before the Christian era.

This is regarded by me, not as a question of dogmatical opinion, but simply as one of *fact*:—a question in which the various nations, in favour of the antiquity of their own literature, or in defence of their traditions, while treated with respect, are not the less inadmissible, in strictly scientific researches the sole object of which is to elicit *truth*. In its consideration, the *traditions* of all countries must be submitted to an impartial criticism of the sources, the authorities, the respective epochs of their first graphical registration; of the transmutations of *written characters* which the works of such authorities have severally encountered, since the age in which each author wrote; of the vicissitudes that history and palæographical analysis combine to show that these original manuscripts, or the earliest *copies* extant of such manuscripts, have undergone, in the transmission of a given author's writings down to our present day; and above all, it is an indispensable preliminary to ascertain by whom, and through what *medium*, these written traditions have been preserved to us. The *principles* of criticism contended for, without its being necessary for my argument to go so far back as CLERICUS, ("Ars Critica," 1698,) are set forth by LETRONNE, ("Recherches géographiques et

* *Baltimore*, 10th March, 1845; *Philadelphia Ledger*, 15th December, 1846; *New York Farmer and Mechanic*, 24th December, 1846; *Brooklyn Daily Advertiser*, 19th December, 1846; *New York Observer*, 16th January, 1847; *Pittsburgh Telegraph*, 27th March, 1847; *Charleston Southern Patriot*, 20th November, 1847; *Savannah Republican*, 15th January, 1848; *Mobile Herald*, 1st March, 1848; *New Orleans Commercial Times*, *Daily Bee*, *Daily Crescent*, 31st March, 1st April, 1848; *St. Louis New Era*, 8th May, 1848.

critiques sur le livre de *mensura orbis Terræ*, composé en Irlande, au commencement du neuvième siècle, par DICUIL, suivie du Texte restitué."—Paris, 1814; pages 41 to 91;) and their application may be seen in DE WETTE, ("Introduction to the Canonical Scriptures of the Old Testament," PARKER's translation, Boston, 1843; vol. I, pages 307 to 314;) no less than in PORTER, ("Principles of Textual Criticism," London, 1848; Chapters I. and V.)

Objections to my negative argument based upon individual preconceptions, that depart from the general tenor or spirit of the rules contained in the above work, carry with them no weight in a purely scientific inquiry:—for an inquiry it is; and with full consciousness of my own insufficiency to solve the problem proposed, the following brief definition is herein put forward merely as an inquiry. And the best evidence I can give of the very slight value I attach to personal opinion, whenever my humble convictions are proved to have been erroneous, is that I must commence this succinct tabulation of facts with a formal renunciation of the doctrines entertained by me, six years ago, when I published *Chapter II.*, on the "Art of Writing."—"Chapters on Early Egyptian History," 1843:—pages 11 to 18; and page 36.*

I will not weary the reader's patience with excuses for former errors, which no great reading on his part of the works published up to 1842, on these hieroglyphical discoveries, will show to have been at that time, and in America, very natural and venial, inasmuch as Egyptological science has progressed, a little, in the last six years; but submit at once a few extracts from my portfolio, by anticipation of a future work, in which these facts will be re-considered and carefully elaborated. As I shall be scrupulously particular in references to authoritative sources, the critical can, without difficulty, follow my steps on this road of inquiry.

Let me first posit the thesis in the language of PAUTHER:—

"Many centuries elapsed from the day when man first appeared upon the globe which he inhabits, until that at which, united into society he discovered the means of giving a determinate form to his thoughts, until then fugitive, by causing them to pass into the domain of the material world. The first attempts that were made to establish a link of communication between the world of forms and that of ideas, must necessarily have participated in the imperfection of man's intelligence, which could not arrive at its complete development but through the progressive development of this grand instrument of civilization. It has been often said and repeated that language and writing were not human productions, but divine revelations. If it has been intended to say, that the faculty which man possesses of expressing his thoughts by numerous articulations and subjected to varied laws, to communicate them by means of certain conventional signs, is a faculty which he holds from God, like his other faculties, the assertion was correct; but if, on the contrary, it was intended to say, that language and writing were directly revealed by God to man, essentially incapable of arriving himself at the creation, (for himself,) of any given language and of the conventional signs of communication, a grave error, according to us, has been fallen into; because, human languages, and the signs destined to represent them to the eye, are too imperfect, notwithstanding the efforts towards perfection that successive generations have brought to bear on them, to be the work of God." ("De l'Origine et de la Formation des différents Systèmes d'Écritures Orientales et Occidentales"—Paris, 1848, pages 1 and 2:—also in the same erudite author's, "SINICO-ÆGYPTIACA: Essai sur l'Origine et la Formation

* It is an odd coincidence that, at the moment when an amiable and erudite Reviewer has been pleased to notice the first and uncorrected edition, (WINCHESTER's, New York, 1843,) of my little pamphlet, which since that day has passed through twelve editions, (25,000 copies having been sold by its successive proprietors,) the Author himself, perchance better instructed than was his lot seven years ago, should beguile a leisure hour in denouncing those very hypotheses, for which in that critique he receives favour, as past philosophical heresies! (See the WESTMINSTER and FOREIGN QUARTERLY REVIEW; Jan. 1849; Art. IV., "Ancient Egypt.")

The reader may compare the laborious character of these investigations in that learned Review, (pages 399 and 420,) wherein the hundred is quoted, the hundred is quoted, not a single monumental discovery of the myriad noticed, with my recent observations: ("Ethnological Journal," No. VII., Dec. 1848, pages 298 to 302.)—G. R. G.

Similaire des Ecritures Figuratives Chinoise et Egyptienne; Paris, 1842, pages 1, 2.)*

It was owing to investigations consequent upon the study of these two works, in which my accomplished friend, M. PAUTHIER, has condensed into a few pages, views historical and critical, on *Alphabets*, &c., that are not to be found, if at all, in any two books written in our English tongue, that enabled me, in former lectures, to lay some general results upon the *origin, order, and ages* of writings before American audiences: (see *reports* in the *Boston Evening Transcript*, 30th Nov., 1844; and *Baltimore Sun*, June —, 1845.) They are as follows:—

Ist AGE.—The *figured* representation of objects and ideas; otherwise the *pictorial* age.

Of this age we possess nothing that can be safely referred to primeval antiquity. All barbarous nations, like the tribes of North America, still strive to perpetuate their simple traditions by *pictures*.

To this age, with a probable infusion of the *symbolical* element, (although, as yet, whether of their lost languages, undeciphered writings, or chronology, it may be said that we literally *know* nothing,) may perhaps be referred the *Pictures* and so-called *Hieroglyphs* of the ante-Columbian monuments of Mexico, Central America, and Peru. The vigorous researches of Messrs. SQUIER, MORTON, GALLATIN, &c., rendering imminent some most important discoveries, I advert to Transatlantic Antiquities merely to show that I am very far from disregarding the labors of my American colleagues, with the general results of which their kind liberality has made me acquainted.

On Hindostanic Antiquities—I allude to the *Budhist* and *Brahmanical* caves—very little chronologically speaking, seems to be known, and that little no longer, as was formerly, on the uncritical days of the learned but credulous Sir W. JONES and his school, claims for them a *remote* antiquity, in the Egyptian sense of

* The opinion of GALILEO, endorsed two centuries ago by one of the greatest biblical scholars the world has ever produced, is too authoritative to be withheld.

“Concludam verbis summi nostri seculi Mathematici, et novorum inventorum gloria clarissimi, magni GALILEI, System. mund. in Colloq. I., diei ad finem, ‘Super omnes inventiones stupendas, qua ingenii eminentia fuit is, cui venit in mentem excogitare modum penitissimas animi occupationes, et tantumque commotionum, et sollicitudinis loco et temporis intervallo, et in his qui necesse est, ut quicquid invenitur in hoc seculo, his qui necdum nati sunt, nec nisi mille aut decies mille abhinc annis nascuntur? idque quanta facilitate? nimirum viginti characteres in charta, inter se varie jungendo: Esto hoc omnium admirandarum *inventionum humanarum* sigillum.” (WALTON, “*Biblia Polyglotta*,” 1657; Prolegomena II., § 1, page 7.) Soliciting attention to the above remark, that writing is the most admirable of all *human* inventions, I would observe, that modern, and especially Egyptian researches demonstrate, that we are under an illusion if we regard alphabetical or other writing as the invention of one man, one people, or one age; because we can now trace the progressive development of the *Alphabetic* principle, along a chain of consecutive monuments whose sculptured records are coetaneous with the events recorded on them, from an imperfect *syllabarium* of fifteen articulations at the IV. Memphite dynasty, down to an almost complete literal Alphabet in the Demotic texts of the sixth century B.C.: (see Mr. BIRCH’s definition, *infra*.) That which it has taken above thirty centuries to develop and perfect, in Egypt alone, ceases to enter into the category of sudden *inventions*.

To the reader, the reader is referred to WALTON’s discussion of the divine or human origin of letters, and written characters.—(Prolegomena I., sections 1, 2 3:) the question, that of language, being herein untouched; as it is first indispensable to reach some definite solution of the latter. And, besides consulting the succeeding *Prolegomena*, of this upright and critical scholar on the vicissitudes which Hebrew literature has encountered, it would be well to study KENNICOTT, (“*Dissertatio Generalis in Vetus Testamentum Hebraicum*,” Oxford, 1780;) on the very defective condition of existing Hebrew manuscripts, none of which can be carried back more than 800 to 900 years, and the incessant errors of copyists and translators. “*Judeorum grammaticam vereor esse mutilam; idem Rabbinis scpe hallucinantur*,” asserts LUTHER:—“I am amazed, says MICHAELIS, when I hear some men vindicate our common readings with as much zeal, as if the Editors had been inspired by the Holy Ghost!” (KENNICOTT, “*State of the printed Hebrew Text of the Old Testament considered*,” Oxford, 1759; *Dissertation* II., pages 583 and 588.)—G. R. G.

the adjective. Without covering the page with citations let me refer to one of the most competent among recent explorers, PICKERING; ("The Races of Man," &c. Philadelphia, 1845: page 253; and Chapter xxv.; *Antiquities and introduced Animals and Plants of Hindostan.*)

It being vain to look elsewhere on the earth's surface for vestiges of *primeval* monuments, we turn to *Egypt* and to *China*, whose records will admit of our following their autochthonous annals, distinct as they are from each other geographically and ethnologically, back to ages anterior to the thirtieth century B.C. (See my *Chronological Parallels* between Egyptian and Chinese history, in the *Boston Evening Transcript*, 25th June, 1845: copied in many American Papers, but with some additions and corrections in the *Pittsburgh Times*, 22nd March, 1847.)

Of the purely-pictorial age no remains are known in China probably, coetaneous in erection with epochas so distant and primitive. In both countries the exclusively-pictorial age of writings antedates all monuments that time has spared. Mr. BIACCI's obliging communication, at the same time that its authority is incontestable, supersedes any remarks of mine on the state of the *Figurative, Symbolical*, and *syllabico-Phonetic* system of the Egyptians at the very earliest epoch of their *monumental* history; together with the progressive development of the *alphabetical* principle as we descend from the tombs of the IIIrd and IVth Memphite dynasty, (say with BUNSEN B.C. 3,200,) down to the Persian conquest, (B.C. 525,) the age of quasi-alphabetical *Demotic* papyri. (Vide infra, APPENDIX H.)

The above-named works of PAUTHIER, (and his admirable "*Chine Ancienne, d'après les documents Chinois*," Paris, 1837,) show that, at the epoch of the *Inscription* of Yu, (B.C. 2278,) and of the ancient *Vases* preserved in the Museum of Pe-king, (B.C. 1800,) the primitive characters, KOU-WEN, had already progressed from the purely-pictorial style into a more cursive writing. The formation and use of the exclusively-pictorial characters, therefore, antedate B.C. 2278, in China; together with the mnemonical use of *knotted cords*; like the Mexican Quippos, and the *wampum-belts* of the present Indians.

The resemblances, few in reality, traceable between what of purely-figurative characters are still discernable in the earliest legends of China and Egypt, proceed neither from any known community of physiological origin of the denizens of the Nile and those of the Hoang-ho, nor from any possible intercourse between these radically-distinct nations at that primordial epoch, but simply from the rule, that "similar causes operating upon similar elements naturally produce the same effects:"—that is, in Egypt or in China, when man wished to write the SUN, he drew an *orb*, when the MOON, a *crescent*, and so on. The picture was necessarily the same in both countries.

IIInd AGE.—The *altered* and *conventional* representation of objects: otherwise the *transition-period*; when the pictorial signs pass into the *symbolical*, and thence gradually into the *syllabico-phonetic*.

To this age belong the *ideographic writings* of the Chinese secondary period, classed as follows; (PAUTHIER, "*Sin.-Egyp.*," page 24.)

1st.—HIGH ANTIQUITY; B.C. 2637 to 3369—according to the Chinese annalists, the KOU-WEN, or *antique writing*.

2nd.—MEDIUM ANTIQUITY; B.C. 820,—the TA-TCHOUAN, or *altered image of objects*.

3rd.—LOW ANTIQUITY; B.C. 227,—the SIAO-TCHOUAN, or *image still more altered of objects*;

4th.—MODERN TIMES; B.C. 200 to A.D. 1123, and still in use,—*four kinds of current writing and typography*.

The above are formed upon principles presenting some few analogies, but in the main remarkable differences, when compared with the Egyptian *phonetic* system. (PAUTHIER, pages 98 to 110.)

Under the same age may be classed the *Hieroglyphical* and *Hieratic* system of Egypt, the latter being a *tachygraphy* or *short-hand* of the former.

To the posterior terminus of this age in the order of development, if not perhaps strictly in that of time, may belong the three kinds of *Chaldaeo-Persopolitane*, *Persepolitan*, *Median*, (not older, so far, than DARIUS, B.C. 520, and the *Ninevite*; but, although possessor of the treatises of LONGPERIER, RAWLINSON, and of my old Egyptian colleague, M. BOTTA, no less than through Mr. LAYARD's courtesies favored with some facilities for study, I am as yet too little versed in the subject to venture the slightest opinion; but refer to HINCKS, ("On the Three kinds of *Persepolitan Writing*, &c."—Trans. R. Ir. Acad., 1847.) One point, however, as I declared to M. BOTTA at Paris, three years ago, when admiring the vast collection exhumed by this intrepid Orientalist at Khorsabâd, seems worthy of attention. It is that, were it not for the hieroglyphical records of Egyptian dominion over NINEVEH, BABEL, SHINAR, NAHARINA, &c. &c., by the Pharaohs of the xviiith dyn., which establish the existence of the city NINWE in days contemporary with the 15th century B.C., it might possibly be found arduous to sustain a primeval antiquity for Nineveh, still more for her *arrow-headed* characters, beneath the scalpels of historical, exegetical and archæological criticism. Time will show; for it yet remains to be seen what influence Pharaonic conquests exerted over the later civilization of Assyria. All hitherto developed has been summed up with great perspicuity and elegance by Nineveh's discoverer, LAYARD: (*Nineveh, and its Remains*," 1849; vol. II., pages 153 to 235.)

"Albeit that we have but very vague data in this respect, it is exceedingly probable that all writings began by being *figurative* and *syllabic* before they became purely *alphabetical*. Many alphabets, such as the *Sanscrit* alphabet, the *Eth'opian* alphabet, the *Persepolitan* (without speaking of the *Japanese* and *Corean* alphabets,) are still almost completely *syllabic*, and bear evident traces of a *figurative origin*." (PAUTHIER, "*Sin.-Egyp.*" page 34; and on each alphabet, consult his "*Orig. des Alphabets*," *passim*.)

IIIrd AGE.—The purely-*phonetic* expression of the articulations of the human voice: otherwise the strictly *Alphabetical* age; to which belong all writings which represent no more than the vocal elements of human articulations, reduced to their simplest expression; i.e. A. B. C. D. &c.

To this belong the *Enchorial*, *Demotic*, or *Epistolographic* characters of Egypt; detached from occasional *figurative* and *symbolical* signs: to comprehend which the reader is referred to the works of YOUNG, CHAMPOLLION, particularly to DÈ SAULCY, LEPSIUS, &c. My library being in America, I am unable now to quote passages from their works: but it would appear that, during the 5th or 6th century B.C., the *purely-alphabetical* system was incomplete, if so early, in the indigenous writings of Egypt.

And here we are met by the earliest known *Alphabet*, parent of all Semitic Alphabets, which are the progenitors of all European: viz., the PHENICIAN. Whether the *Phœnicians*, in their incessant intercourse with Egypt, obtained from her civilized inhabitants, their first knowledge of the possibility of writing with *phonetic* characters alone, without the habitual intermixture of *figurative* and *symbolical* signs,* is a speculation I have not space to descant upon. Tradition ascribes the invention of the Alphabet to the Egyptians, from whom, 'tis said, the Phœnicians obtained it. The legendary account of the *Cadmaean* introduction of the twelve or sixteen primitive letters of the Greeks, from Phœnicia, is confirmed by the name KaDeM, which simply means the *East*. The number of *phonetic* signs current in Egyptian hieroglyphics was *fifteen*; and we have the authority of ORIGEN and JEROME for an opinion current in their times, that the *primitive letters* of the Israelites, direct descendants of the *Phœnician* alphabet, were but *fifteen*. I have collected abundant matter in favour of this hypothesis, but am not yet pre-prepared to advance it. I do not contest it. But, that the general reader may behold the probable *order* of the development of human writings, at one view, have sketched a Table, in which to the preceding definitions of PAUTHIER, I have added a page altered and extended from GESNIUS, to whose profound work I beg leave to refer for all justificatory details. ("Scripturæ Lingueque Phœnicie Monumenta quotquot supersunt," &c.: Lipsiæ, 1837, page 64.)

* Just as the Cherokee-Cadmus, and half-caste Scotchman by the way, SEQUOYAH; or the Greybo-sage of African Liberia, from intercourse with Anglo-Saxons, conceived and invented their syllabic Alphabets.—("Chapters," page 17.)

THEORY OF THE ORDER OF DEVELOPMENT IN HUMAN WRITINGS.

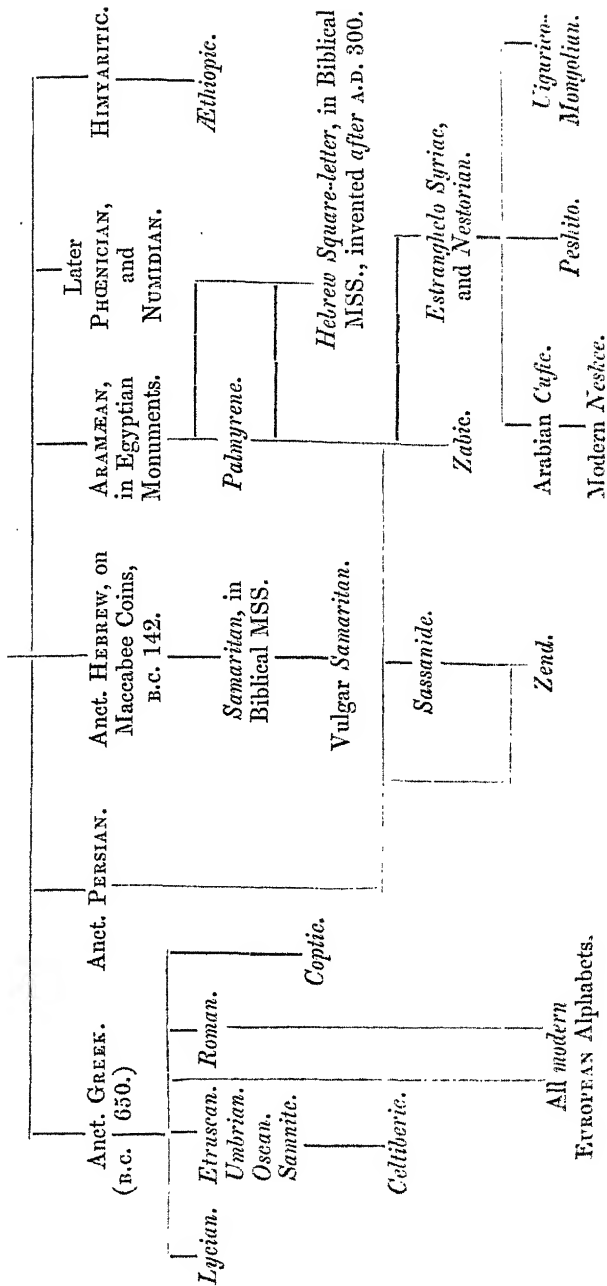
PRIMORDIAL, or <i>ante-chronological</i> PERIODS :—when incipient Humanity, requiring no records, had invented no form of <i>writing</i>		B.C. 00,000
1st AGE ; The PICTORIAL :—current in the <i>ante-monumental</i> days of Egypt and of China.....		B.C. 0,000
2nd AGE ; The Egyptian HEROGLYPHICAL :—earliest <i>monuments</i> extant, the Pyramids and tombs of the iii. and iv. Memphite Dynastysay,	B.C. 3,200
The Chinese IDEOGRAPHICAL :—earliest <i>monuments</i> extant, the Inscription of Yu, with later remains in the <i>Kou-uen</i> character.....		B.C. 2,278
3rd AGE ; The ALPHABETICAL :—earliest <i>monuments</i> extant ; i.e., those indicating a state of transition, (some <i>Boustrophedon</i> ,) Egyptian <i>Demotic</i> papyri, B.C. 500 @ B.C. 600		
<i>Cuneiform</i> Inscriptions : Ninevite		B.C. ?
Persepolitan and Median		B.C. 520

“ *Phœnices primi, famæ si creditur, ausi
Mansurum rudibus vocem signare figuris.*”

(LUCAN. *Pharsal.* III., 220, 221.)

EARLIEST PHŒNICIAN WRITINGS.

(*Boustrophedon* ?)



On the above Table a few observations must suffice for the present, beginning with the *earliest Phœnician* writings. The remoteness of the antiquity of these is rather traditional than monumental; inductively drawn through classical authority (HERODOTUS V., 57, 58; DIODORUS III., 66; PLINY VII., 56; LUCAN III., 220-1; &c.); no *inscriptions* in that character being extant older than B.C. 394: (GESENIUS, *ubi supra*, lib. i., page 10; lib. iii., No. viii., 6.) Yet, as its progenitor, the Phœnician Alphabet, perhaps in a more archaic form than any now known to us, must have preceded the most

—*ANCIENT GREEK.* ~ ~ ~ ~ ~ Of this the oldest inscriptions given by BOECKH do not antedate the 5th @ 6th century B.C.; the earliest ranging between the 40th and 60th Olympiad: (“Corpus Inscriptionum Græcarum;” Berlin, 1828; vol. i., pages 4, 9, 22.) But, if the *inscription* on the colossus at the Speos of Aboosimbel in Nubia be coæaneous with PSAMETIK I., of the xxvith Saitic dynasty, its age may reach B.C. 650. It is to the erudite Mr. SAM. SHARPE that I owe this suggestion; (see WILKINSON, “Topog. of Thebes,” 1835, page 496 :) and for other details on Greek palæography conferre R. PAYNE KNIGHT, (“Analytical Essay on the Greek Alphabet,” London, 1791; pages 17, 19, 61, 111, 119, 120, 121, and 129.) Nothing equally ancient exists among

—*ETRUSCAN* writings: ~ ~ ~ ~ ~ so far as I glean from LEPSIUS, (“De Tabulis Eugubinis,” Berlin, 1833; and the first volume, all I have read, of his later work, “Inscriptiones Umbricæ et Oscæ, quotquot adhuc repertæ sunt omnes;” Leipsic, 1841: and DE ROSSI, “Specimen,” pages 265 @ 274.)

—*LYCIAN* Alphabet. I know of it solely through FELLOWES, (“Asia Minor,” 1838; *Plates*, pages 225, 226, 230, &c.—“Discoveries in Lycia,” 1840; *Plates* xx., page 169, &c.; page 275, and *Appendix*, page 437: and D. SHARPE, “Proceed. Philological Soc.,” 1844, vol. I., pages 194 @ 216;) nor am I aware of any inscriptions older than the 4th @ 6th centuries B.C.

—*COPTIC*, unnoticed by GESENIUS, is a direct and post-Christian descendant of the *twenty-four* letters of the *Greek* Alphabet, with seven additional phonetic signs taken from the *Demotic* texts, to represent Oriental articulations which the Hellenic was incapable of rendering: (*Chapters*, page 18; PARTHEY, “Vocabularium Coptico-Latinum,” Berlin, 1844, *passim*; DE SAULCY, “Analyse Grammaticale du Texte Démotique,” 1845, &c.; BUNSEN, “Egypt’s Place,” 258 to 269, 480 to 552:—QUATREMERE, “Recherches sur la Langue et de la Littérature l’Egypte,” 1808: &c., &c.)

Having no knowledge of Numismatics I am here dependent on the obliging information of friends. I am told, however, that not a single *ancient coin* exists, with an *alphabetical* letter upon it, anterior to the reign of ALEXANDER I. of Macedon, who died B.C. 451: and without going the length of VICO, WOLF, or HEYNE, in deeming *Homer* an almost fabulous personage, I am aware that his books were collected and arranged, besides undergoing many subsequent Alexandrian recensions, by PISISTRATUS, deceased about B.C. 527: (R. PAYNE KNIGHT, “Prolegomena in *Homerum*,” 1820; iv., v., xxxii. @ xli., xlii. @ xliii.; especially vi.; lxi. on *Hesiod*, &c. &c.)—that much current in *Homer’s* name is not *Homer’s*;—that no mention occurs, throughout the *Iliad*, of *alphabetical* letters; for, in the only passage wherein allusion is made to *writings*, the word is σηματα, *signs*; (*Il.* vi. 168);—and that JOSEPHUS (“Contra Apionem,” i., 2) maintains, that *Homer* did not leave his books “in *writing*, but they were learned by heart, and *afterwards* put together, and therefore the many different readings:” other ancient critics holding opinions to the same effect.

Nor will I dwell on the possibility, knowing from his *Egyptian* mistakes how often the “Father of History” suffered himself to be imposed upon,

that the Pelasgian, or Phœnico-Cadmæan "*letters* inscribed upon Tripods," seen by HERODOTUS, (v., 58) in the Temple of Apollo, at Bœotian Thebes, in the 5th century B.C.;—era ascribed to that *Oriental* immigration into Greece personified in the cognomen (KaDeM, *Eastern*,) of a mythological individual, who "*sowed* dragons' teeth," and "*reaped* armed soldiers." Tradition, too, falters in the ascription to CADMUS of twelve or sixteen alphabetical letters; to which an unknown PALAMEDES added four, and a later SIMONIDES four more, to complete the twenty-four letters of the Greek alphabet.

Passing onwards to more solid ground, I learn, that the most ancient of primitive Grecian *Inscriptions* is the SIGÆAN in the British Museum. Of course, in Greek writings anterior and many posterior to the Christian era (Greek *papyri*, for instance,) the lines contain no *divisions into words*. A few of the best lapidary inscriptions of Greeks, Etruscans, Phœnicians, &c. have their words separated by *stops*; on which conferre GESSENIUS, ("Phœn. Mon.," page 56.—See Mr. A. C. HARRIS' interesting *papyric* discovery, "Fragments of an Oration against Demosthenes," London, 1848:—and the exquisite *fac-similes* of the Codices lxx., *Vaticanus*, A.D. 400? and *Alexandrinus*, A.D. 450? in PORTER, "Principles of Text Criticism," Plate iv., with his critical remarks on biblical *MSS.*, pages 270 @ 275.—DE ROSSI, "Specimen Variarum Lectionum," &c., Rome, 1782,, pages 256, 294.)

But this *Sigæan* inscription, like most of the early Greek, many of the Phœnician and Punic, and some of the Himyaritic, (FÆSSEL, "Journal Asiatique," Sept., Oct., 1845: and "Recherches sur les Inscriptions Himyariques," 1845, Nos. vi., xi., xii., xiii., xiv., xxxii., xxxviii., xxxix., lii., lvi.,) proceeds βουστροφῆδον; i. e. forwards and backwards, in alternate lines, like the *furrows* of the *Ox-plough*; one line reading from left to right, (or vice-versa,) and the next from right to left. (BOROKH, "Corpus," vol. I., pages 14 @ 22;—DE ROSSI, "Specimen," pages 237 @ 290.) Egyptian *Hieroglyphics*, classed in the 2nd AGE of my Table, are written indifferently in either direction; generally determined by the right or left hand side of the walls of a monuments: (CHAMPOLLION, "Grammaire Egyptienne," 1836; pages 18, 19, 20: and *Chapters*, page 23.) The only instance in which Egyptian hieroglyphics have been found to proceed *boustrophedon* was pointed out to me by Mr. BIRCH. It occurs on the Sarcophagus, supposed before CHAMPOLLION'S discoveries to have held the corpse of *Alexander the Great*,—known as that of *Amyrtæus* of the xxviiith dynasty; or, according to Dr. HINCKS, of NeXTeNeV of the xxxth dynasty; date ranging between B.C. 357 @ 404.

An obscure passage in Festus enlarged upon LANCI, ("Paralipomeni," vol. i., book 1,) says in this connection, "the Greeks called *Tæcopoon* that style of writing which descends from top to bottom;" obviously *vertical* writing, as in Chinese books and on Egyptian *Obelisks*, &c. Deeming this non-hellenic word to be of Oriental derivation, LANCI reads *Tæcopon*, drawing it from the Arabic WaKaF, "to stand *upright*;" cognate with a Rabbinical name for the solstices and equinoxes. This text proves again that *vertical* writing was not unknown to the Greeks. Early Arabian or *Semitish* nations, whose usages are generally the reverse of those current among Indo-germanic, or *Japethic* families, designated the *to-them* strange writings of Greeks and Romans, by the terms MEFRA, *reversed*, or GONDOLITH, *from the left*: and we find all perfectly-formed European inscriptions taking the latter, and all purely-Semitish the former direction. The old *Hieratic* (HINCKS, "Ages of the *Papyri*," in "Hieroglyphical Alphabet," 1847; page 34 et seq.:—and *Papyri* published by the British Museum, 1841 @ 1844:) and the more recent *Demotic* writings of Egypt, whence analogy and history might lead us to infer that the *Phœnicians* derived the first notions of their primitive alphabet,

proceed, like the latter's direct descendants, the *Hebrew, Samaritan, &c.*, also from right to left.

It being legitimately inferible, then, that all *boustrophedon* inscriptions, in each country, belong to an age anterior to the permanent settlement of the dexter or sinister direction of such nation's writings, it becomes relevant to inquire into the *direction* of the writings of the *Mosaic Tables of Stone*.

LANCI, indeed, perplexed as all students must be with this enigma, renders the *unpunctuated Hebrew Text* (i.e. divested of the Masoretic points which, not antedating the 6th century A.D., are of no authority,) of Exodus xxxii. 15, 16, in the sense that the Mosaic Tablets were also inscribed *boustrophedon*:—"le Tavole erano scritte ne' due loro procedimenti, di quà e di là erano scritte:" ("Paralipomeni," vol. i., page 86, &c.) In short, considering these Sinai Tables to have resembled in shape the Egyptian *Steles*, they may have been written on *one side* alone, in a sort of *vertical-Boustrophedon*; the Hebrew lawgiver, educated in Egypt, being familiar with hieroglyphics, (Acts vii., 22,) as well as with the *Hieratic* current in his day.*

Now, inasmuch as we find the writings classed in the 2nd AGE of my Table, such as the hieroglyphics of Egypt, which are anterior to, and possibly the parents of the earliest Phœnician characters, inscribed from right to left or from left to right, horizontally or vertically, it will naturally follow, if this be the correct derivative order of *alphabetical* writings, that wherever we find alphabetical inscriptions proceeding *boustrophedon*, such inscriptions represent the *elder* styles; in use before the direction of the letters was permanently fixed in Phœnicia, Arabia, Greece, or Etruria. Such an indeterminate system bears the impress of *imperfection*; and marks an age when the art of writing, in purely *alphabetical* letters, was still in its infancy. Hence I infer, that, in the 6th to 7th century B.C.—epoch of the *oldest* Greek inscriptions (see BOEHRH, loc. cit.)—*alphabetical* writing was of very recent introduction among the Greeks, and that it must have been equally *imperfect* among their acknowledged teachers, the *Phœnicians*.

Again, in all these ancient inscriptions, the number of letters varies from sixteen to twenty-two; but, however, eighteen or nineteen in the best Phœnician and Greek inscriptions. Such, at least, is the result of my enumeration of the letters contained in the alphabets of GESSENIUS; (Tab. i. @ iv.: but see Dr ROSS, "Specimen," note, pages 322 @ 346.) PLINY, ("Hist. Nat." vii., 56,) quoting ARISTOTEL, states that the primitive *Kadmœan*,—i. e. *Oriental*,—alphabet had but eighteen letters: and we find that the early Greeks rarely used the *zade*, *san*, and *koppa* of the modern Hebrew *twenty-two*-lettered alphabet; neither did they, nor any other European

* If these Mosaic Tablets antedate the 7th century B.C. (cf. DE WETTE, MUNK, BOHLEN, or the "History of the Hebrew Monarchy," London, 1847, pages 332 to 338, on the *ages* of the Books of the Pentateuch,) when alphabetical inscription was yet so unregulated as to proceed *boustrophedon*, it becomes probable, that the *characters* written on them were of the anterior, or 2nd AGE of my Table—i.e. not *alphabetical*, but *symbolico-figurative*? which hypothesis is favored by Exodus xxviii., 21; wherein the contemporaneous pectoral of AARON is described as having, on the THUMMIM, the *twelve Tribes'* "names engraved in the form of SEALS;" perhaps referring to some symbolical species of *Heraldic Arms*, or *zodiacal standards*, by which each Tribe was typified: (Cf. the mystagogic analogies collected by KIRCHER, "Œdipus Aegyptiacus," Rome, 1653; vol. ii., part i., page 21: and by DRUMMOND, "Œdipus Judaicus," London, 1811, Plate 15; explained in "Dissertation on xlixth chapter of Genesis.") But, for an entirely *new* translation of Exodus xxxiii., 11, to xxxiv., 10, let me refer to LANCI ("Paralipomeni," vol. i. page 179, et seq.); and see some curious researches into the original order of the Hebrew Alphabet in his most scarce, because *confiscated*, work: ("La Sagra Scrittura illustrata," &c. Roma, 1827, pages 209 to 250.)

people, adopt the unpronounceable AIN or GNAIN of Semitic nations; (Gesenius, page 67;) so that the Plinian and other traditions of pristine sixteen or eighteen letters are confirmed by the oldest Grecian inscriptions. Their teachers, the primitive Phœnicians, can hardly have used more than fifteen or sixteen letters, as tradition also ascribes to them; but there being no Phœnician monuments extant as old as the 7th century, a doubt must be reserved. It is likewise maintained, by ORIGEN and JEROME, that the old alphabet of the Hebrews had but fifteen letters; and inasmuch as Hebrew characters are an affiliation of Phœnicia, the Phœnicians could scarcely have possessed more. Now, the phonetic system of the Egyptians, in their hieroglyphics, comprised but fifteen or sixteen syllabic-articulations, or primitive letters: (see LEPSIUS, "Lettre à Rosellini," Rome, 1836: BUNSEN, "Egypt's Place," page 280: and Mr. BIRCH's critical synopsis, *infra*.)

If, then, in the 7th century B.C.—period of the oldest purely-alphabetical documents extant—the art of writing in these characters was so defective, so undetermined as frequently to proceed *boustrophedon*, and the alphabets themselves contained no more than from fifteen to nineteen letters; if such, I repeat, was the condition of palæography in the seventh century before the Christian era, on what grounds really historical or monumental, and upon what valid authority, archæologically and not hagiographically speaking, can the purely-alphabetic system of writing be carried back to the tenth century, B.C.?—still less to the fifteenth?*

But it is imperative to deprecate two objections; one of the Indologists, and the other of the Hebraists.

The former may assert the primeval antiquity of the DEVANAGARI, "writing of the Gods;" or Sanscrit, "the most perfect alphabet of all the known tongues. Far from bearing, like the alphabets of Semitic languages, the stamp of a painful and slow invention, still hampered by the trammels of figurative characters, it seems to have been formed by the highest philosophical and analytical intelligence that has yet appeared in the world:" (PAUTHIER, "Systèmes d' Ecritures," &c., page 583; with its derivatives, the Thibetan and Pali-Cingalese, pages 584 @ 586.)

The two latter having been invented long after the Christian era, the parental Sanscrit alone calls for a few citations.

I dispute not that the "Sacred Books" of Hindostan may have been composed as far back as the fourteenth century, B.C., although unable to comprehend upon what solid ground this doctrine of COLEBROOKE's is based; be-

* The preceding Table having indicated the consecutive and gradual development of the alphabetical principle through long cycles of time, from the ante-monumental period down to the 7th century B.C., it required no great length of interval between the oldest known inscription of the 7th century B.C., and the first adoption by the Phœnicians of their primitive alphabet of fifteen or sixteen *αρχαία* or *πρωτα στοιχεία*, to raise up a number of pupils in the art. GEORGE GUESS, alias Sequoyah, among the Cherokees, and the African Sage among the GREYBOS of Liberia, when once they had seen European writing, found no more difficulty in inventing and rendering immediately current among their respective people, the peculiarly-shaped alphabet each had conceived, than did ULPHILAS among the Goths in the 4th century, A.D., or CYRILLUS among the Slavonians in the 9th. At this day Missionaries fabricate new alphabets for barbarous and distant tribes with remarkable facility, no less than some new languages. Take, for instance, amid other delicious examples, "Original Sin" in the OTTOMI grammar,—TLACATZINTILIZTLATLACOLLI; or "repentance" in DELAWARE,—SCHIWELENDAMOWITCHEWAGEN: (GALLATIN, "Trans. American Ethnological Society of New York," 1845 pages 29, 33, 35, &c.)

cause, when I read BURNOUR, ("Introduction à l' Histoire du *Bouddhisme*," and his "Commentaire sur le *Yagna*,"—not before me to quote, nor on the catalogue of the British Museum Library;) no original *Sanscrit* MSS. were mentioned of any but a post-Christian antiquity. Nor will Orientalists, who have realized how thoroughly the *Sanscrit* is the *poetry* of modern Asiatic nations represent those of the ancient, deem that consummate skill in manufacturing "sublime *Poetry*," among erudite Pundits who so successfully duped WILFORD, at all of recent origin: "sicut erat in principio," &c.*

The very fact that the *Sanscrit* is the "perfection of alphabets" implies, that it is the result of long centuries, occupied by some minds, somewhere, in progressive stages. And, while it not impossible that this perfect syllabarium owes its formation to intercourse with Greek intelligence, or to Himyar, through Abyssinian *Ethiopia*, it must be remembered that no *Father* is proposed to us for the *Sanscrit* alphabet: (Cf. WALL, "Ancient Orthography of the Jews," &c.; London, 1840; vol. ii., pages 270, 403 @ 409; Plate 4.)

When, therefore, the contenders for the ante-diluvian remoteness of the forty-eight-lettered *Sanscrit* Alphabet can produce any stone, or other record older than the "column of *Allahabad* in honor of TCHANDRA-GOUPTA,† *Sandracottus*," cotemporary with SELEUCUS Nicator, B.C. 315, it will be time enough for Hierologists, Sinologists, Hellenists and Hebraists, to take into account the pseudo-antiquity of *Sanscrit Alphabetical* literature.

"Cadono le città, cadono i regni,
E l'uom d'esser mortal par che si sdegni."

(Metastasio's paraphrase of *S. Sulpicius'* letter to *Cicero*.—*Epist.* V. lib. 4.)

The Hebraist calls for infinitely higher respect; but there are well meaning persons who, disregarding the herculean labors of the *Exegetists*, and

* That the peninsula of Hindostan thronged with varied populations, possessed great Empires and a high state of culture, in ages parallel with the earliest monuments of Egypt and China, upon whose ruins the *Sanscrit* exerted, and from which she experienced influences, in the flux and reflux of Humanity's progressive development, no one, *nisi imperitus*, will deny: but the hallucinations about early Brahmanical science in Astronomy, when their Zodiacs are *Greek*, their Eclipses calculated *backwards*; and their *chronology* is built upon *Chaldean* magianism, leave the historical antiquity of India prostrate beneath the axe of the *short-chronologist*. "Un astronomo può, se vuole, far le tavole dell'eclissi che avranno luogo di qui a cento-mila anni, se il mondo esisterà; e può ugualmente determinare lo stato, nel quale sarebbesi trovato il cielo centomil'anni fa, se il mondo esisteva." (TESTA, "Dissertazione sopra due Zodiaci," &c.; Roma, 1803, page 23.) The Hindoos, in concocting their primeval chronology, merely added a *naught* to Babylonish cyclic reckonings;—4,320,000 years, instead of 432,000! (DE BROTONNE, "Filiation des Peuples," 1837; vol. i., pages 234 to 251, and 414.) See ample confirmations of the above view in the critical work of WILSON, ("Ariana Antiqua," 1841; pages 17, 21, 24, 419; 44, 45; and particularly p. 439, wherein it is shown, that numismatic studies cease to throw any light on antiquities about the middle of the 3rd century B.C.) It is the more essential herein to point out the excessively-modern invention of the *Sanscrit* alphabet, inasmuch as a learned Architect, whose work abounds with similar oversights, regards the *Cuneatic* inscriptions of Persepolis, "as merely a selection from among the complicated characters" of the *Sanscrit Alphabet*! (FERGUSON, "True Principles of Beauty in Art," &c; London, 1849; page 270, and again page 289.)

† Who may be a *later* TCHANDRA-GOUPTA,—"how are the mighty fallen!"—of the Rathore dynasty of Kanoudj; 6th to 7th century, A.D. ! (PAUTHIER, note ubi supra; and *Trans. Asiat. Soc. of Bengal*, June, Nov. and Dec. 1835.)

wilfully ignorant of the first elements of biblical criticism, which are very accessible now-a-days, even in the English tongue, reason upon Hebrew literature as if King JAMES' *Version* really had been "*printed* (Job. xix., 23,) in a *book*," and in the English vernacular, at Mount Sinai, some 3350 years ago.*

No archaeological discussion can be held with such until they have, at least, perused NORTON, ("Evidences of the Genuineness of the Gospels," Boston, 1844, vol. ii. *Appendix on the Old Testament*, Section iv.) But to the Hebrew scholar I propound the following interrogatories:—

I.

What MSS. of the Hebrew Text, now extant, antedate the 11th century, *Anno Domini*?

(KENNICOTT, "State of the *printed* Hebrew Text; Oxford, 1753-9; 1st *Dissertation*, pages 306, 307; 2nd. *Dissertation*, page 465:—IBID. "Dissertatio Generalis;" Oxford, 1780; § 132, pages 110 and 113.—WALTON, "Biblia Polyglotta," 1657; *Prolegomena* vi, § 3; vii, § 3; &c.—DE ROSSI, "Introduzione alla Sacra Scrittura;" Parma, 1817, page 34.—PORTER, "Principles of Textual Criticism;" London, 1848; page 81.)

II.

Is not each of these a copy of one or more lost MSS., which had all undergone *Masoretic* recensions? And is not each one of existing MSS. in a very *corrupt* state?

(WALTON, *Prolegomena*, ii., § 38, 39; § 40 and 45.—KENNICOTT, 1st *Diss.* pages 234, 263; 2nd *Diss.*, pages 53 and 58; "Masora," pages 222 to 306; "the Hebrew Bible was *printed* (AD. 1487 ?) from the latest and worst MSS.," page 470; "Errors in our *English Version*," pages 579 to 588.—IBID., "Diss. Gen.," § 13, 14, 19, 25, 28, 60 to 62, 73, 76 to 132, for specific *corruptions* of MSS., and of *printed* Text.—DE ROSSI, "Compendio di Critica Sacra;" Parma, 1811, page 7; "Horrible state of Text," pages 9, 22.—IBID. "Introd.;" "Masora," pages 20 to 22.—IBID., "Specimen Variarum Lectionum Sacri Textus;" Rome, 1782; pages 446 to 460.—ROSELLINI, contro CHIARINI, "Nuova Collezione d'Opuscoli;" Bologna, 1824; pages 186 to 202; in annihilation of the *authority* of *Masoretic* vowel-points, &c.—PORTER, "Masorah," pages 53 to 67; "Corruptions," pages 60 to 66, and Chapters v., vi.)

* "Il y a des gens, says the most philosophic of many truly-learned *Rabbis* MAIMONIDES, "il y a des gens à qui il répugne de voir un motif dans une loi quelconque des lois (divines); ils aiment mieux ne trouver aucun sens rationnel dans les commandemens et les défenses. Ce qui les porte à cela, c'est une certaine faiblesse qu'ils ressentent dans leur âme, mais sur laquelle ils ne peuvent raisonner, et dont ils ne sauraient rendre aucun compte. Voici ce qu'ils pensent. Si les lois devaient nous profiter dans cette existence (temporelle), et qu'elles nous eussent été données pour tel ou tel motif, ils se pourraient bien qu'elles fussent le produit de la réflexion et de l'intelligence d'un homme de génie; si au contraire, une chose n'a aucun sens compréhensible et qu'elle ne produit aucun avantage, elle émane, sans doute, de la DIVINITÉ, car la réflexion humaine ne conduirait pas à une pareille chose. On dirait que, selon ces esprits faibles, l'homme est plus grand que son créateur; car l'homme, (selon eux) parlerait et agirait en visant à un certain but, tandis que DIEU, loin d'agir de même, nous ordonnerait, au contraire, de faire ce qui n'est pour nous d'aucune utilité, et nous défendrait des actions qui ne peuvent nous porter aucun dommage." (*Del-lalat el Khayer en*;" Hebraicé, MORE NENOKHIM.—"Guide to the Strayers," Ch. xxxi.: MUNK's Translation; Paris, 1833.)

III.

Is not the earliest date, assigned to the *Masora Rabbis*, the foundation of the College of Tiberias, in 506 *Anno Domini*?

(MUNK, "Examen," in CAHEN'S Exodus, page xv.---IBID., "Palestine," 1845, page 611.---D'OLIVET, "Langue Hébraïque Restituée," 1815: Intro. page 33.---DE WETTE, "Introduction to the Canon Scripturae,"---transl. PARKER, Boston, 1843, vol. i, page 310 to 312.)

IV.

Did the present *Square-letter* characters of the Hebrew Alphabet, called ASHURI, or *Assyrian* letters, exist prior to the third century, *Anno Domini*? GESSENIUS expressly says, "*Scripturam quadratam seculo demum post Chr. tertio ortam esse.*" And the profoundest Semitic scholar of the age, MICHELANGELO LANCI, for 39 years "Professor of Sacred Philology" at the Vatican, thus declares:—"le assirie forme degli ebraici manoscritti ben lungi dall'essere di Esdra, vengono dal secondo, o terzo cristiano secolo, epoca del gerosolimitano Talmud; e nel sesto, settimo et ottavo secolo, epoca dell'araba calligrafia, presero quelle forme nuova gentilezza nella figura, si perfezionarono, e giunte a perfezione non mai piu fecero cambiamento."

("Scripturæ Linguaeque Phœnicæ Monumenta," Leipzig, 1837: lib. ii., cap. 8, sec. 41, and page 78.---IBID., "Geschichte der Hebräischen Sprache und Schrift," Leipzig, 1815, page 8, 140 et seq.---DE WETTE, vol. I. *Appendix*, pages 489 to 502, &c.---LANCI, "Osservazioni sul Bassorilievo Fenico-Egizio," di Carpentrasso," Roma, 1825; page 127.---DE ROSSI, "Specimen," &c., 1782, pages, 315, 316, note.)

V.

What else but the *Coin-letters* on the *Shekels* current at Jerusalem as far back as 141-2, B.C., or the reign of SIMEON, prince of the Maccabees, can have been used by the anterior Hebrews in their sacred code? Previously to the third century, A.D., at which date the *form of Jewish letters* was changed? And as far back as the time when EZEKIEL, (B.C. 590 to 536,) writing in Chaldea, inscribed the *cruciform Coin-letter*, T, THAU, in verses 4 and 6 of his Chapter ix.? Not the only place where *Thau* occurs:—(1 Samuel xxi., 13; Job xxxi., 35; Psalms lxxviii., 41.)

(KIRCHER, "Prodromus Coptus," Rome, 1636, pages 162 to 166;---IBID. "Œdipus Ægyptiacus," 1652; vol. II., Part 1, 87 and 146.---WALTON, *Table of Alphabets*, page 38, *Prodromus*: II. § 23; III. § 31.---DE ROSSI, "Specimen," pages 341: III. *Prodromus*, 2nd *Diss.* pages 49 and 161.---*Diss.*, Gen., sect. 27, &c.---GESSENIUS, "Geschichte," pages 150, 151, 170, 176.---IBID., "Phœn. Mon." *Tab.* iii., and page 78.---LANCI, "Sagra Scrittura," cap ix., page 209, et seq.---IBID., "Paralipomeni," I., 228, &c.---IBID., "Monumento Fenicio di Carpentrasso," Rome, 1824, page 126.---LETRONNE, "La Croix Ansée," 1846; pages 33 to 35.

VI.

What was the *Alphabet* of the Hebrews *before* the Captivity, in the seventh century, B.C.? What the *shape* and the *number* of its letters?

The number of letters on the *Coins* of the MACCABEE princes yield an *Alphabet* composed of but 17 @ 19 letters, at B.C. 142., instead of the 22 now in use: (WALTON, *Table*, page 38; GESSENIUS, *Tab.* III.; MUNK, *Pl.* 8, and 21:) and Orientalists need not be reminded, that in the ratio of our recession into antiquity, the palæography of *Semitic* languages becomes indeterminate, the *scriptio plena* is less regular, and the use of the *matres lectionis*, ALEPH VAV,

and Iod, A, U, I, more and more vague: (DE WETTE, vol I., page 489.—MUNK, "Palestine," page 439.)

There must have been an age when, like the parental Phœnicians, the *Hebrews* had but 15 or 16 letters? An age, moreover, that cannot be far removed from the 6th @ 7th century B.C.—epoch of the *oldest* purely-alphabetical inscriptions extant; which proceed *boustrophedon*, and are otherwise *imperfect*. Now, we have passages in the most authoritative Hebrew writers, JOSEPHUS and PHILO, confirmed by the only Hebraical scholars among the early Fathers, ORIGEN and JEROME, to the effect that, "the CANONICAL BOOKS of the Hebrews were 22, according to the 22 letters of the Alphabet." It follows, then, that the *Hebrew Alphabet* must have attained to 22 letters, before the Canon of the Jews was closed.*

Better scholars than the writer affects to be may, perhaps, be able to demonstrate the existence of purely-alphabetical writing at the unknown era of the universal flood.—G. R. G.

NOTE ON THE DEVELOPMENT OF THE SYSTEM OF WRITING HIEROGLYPHICS.

BY SAMUEL BIRCH, ESQ., OF THE BRITISH MUSEUM.

(Appendix H. referred to *ubi supra*, page 97.)

BEFORE entering on this question, it is necessary to bear in mind the meaning of the following terms:—

- A.—*Symbolics*: Hieroglyphic symbols used to express ideas, and never pronounced or read except as the idea was.
- B.—*Determinatives*: Symbols, never pronounced at all, placed after groups of characters which were pronounced, and used to determine or fix their meaning. They are the same as the *Chinese keys*, or radicals.
- C.—*Phonetics*: Symbols used to express sounds, and not ideas, forming groups which express the sounds or spoken words of the ideas intended to be conveyed.
- C."—*Alphabetic*: Expressing one articulation.
- D.—*Syllabic*: Expressing a syllable.

This last may be—

- D.'—*Limited*: Employed to express one or few ideas.
- D."—*Extended*: Used extensively in the texts.

* This legendary era fluctuates between *Nehemiah*, B.C. 420, as the highest point, and the book called *Ecclesiasticus*, B.C. 232; (HOBNE, "Intro. to the Crit. Study of the Holy Scriptures," 1838, vol I., pages 37 to 34; II., page 534;) but it may possibly be brought down to the lowest date attributed to the LXX. version, B.C. 130.—(PORTER, "Principles of Text. Crit.," pages 83 to 106.) If it be objected that several *Psalms*, the last chapter of *Proverbs*, and the Lamentations of *Jeremiah*, commence each verse with a letter of the alphabet, arranged in the latter's present order of 22, and *ergo* that the existence among the Israelites of 22 letters may be carried back as far as SOLOMON and DAVID, 10th to 12th centuries B.C.: it might with equal critical fairness be argued, that this circumstance merely adds another to the many reasons, why these particular texts cannot have been written by the parties to whom Rabbinical tradition ascribes them. (Cf., on each head, DE WETTE, apud PARKER, vol. II.: and DE ROSSI, "Specimen," pages 332, 333.)

E.—*Inherent* : The character whose pronunciation exists in another, although not actually written.

F.—*Complement* : The character written after a syllabic symbol to complete the syllable ; when omitted, it is *inherent* in the syllabic symbol.

G.—*Homophone* : A symbol having similar sound to another, and used in other examples of the same word.

I. Supposed antecedent primæval period of pure *picture* writing—no remains existing.

II. *Archaic period*, IV.-XII. DYNASTY. *Pure hieroglyphics*, elaborately sculptured, especially in the details,* which are well carved. *Linear hieroglyphics*, which depict the form by its outline only ; used for ordinary purposes.† At this stage there was no purely *alphabetical* system ; but, on the contrary, the phonetics consisted of sixteen monosyllables, commencing with the articulations *a, b, f, g, h, i, k, m, n, p, r* \times *l, s, t, sh, kh, u*. The process by which this had been deduced from pure picture writing appears to be this :—‡

Originally, the object was a symbolic, i.e., expressed its own direct meaning ; thus, a *sieve* depicted was KHI, “a sieve” ; a *mouth* represented “a mouth,” pronounced RU ; but the two written together depict the ideas *mouth* and *sieve*, or if pronounced, the sound RU-KHI, which expressed in the spoken language “to know,” or inverted K’HI-RU, in the same primarily-spoken language “to,” or “at.” It is evident, that the misapprehension of meaning suggested the *syllabic* development, as a person reading off a purely symbolical system of picture writing would naturally present to the ear combinations of monosyllables different from what was intended to be seen by the eye ; and human intelligence could soon perceive the value of the application. At this age, the monosyllables, which end in vowels, generally have the vowel inherent (E), and not expressed as complement (B) ; which was added to recall to memory the *syllable*. Thus, the syllable KHI is formed by the *sieve*, in itself KHI ; or by the *sieve* and *two cross-bars*, the syllable IU or UI ; thus, K’H [I]—K’hi [U].§ At this period, the symbols were occasionally doubled, or even trebled, to express the value of unusual sounds, as KHI, KHA, KHAUA, for KHAU, “altar,” showing that the language was in a state of formation or transition. At this age, the use of symbolics and determinatives prevailed, and all the great principles of the language were laid down.

* VYSE Journal, vol. ii. iii., Coffin of *Mycerinus*.—Table of *Cheops* at the Wady Magara.—LEON DE LABORDE,—Voyage dans l’Arabie Pétrée : Tombs near Pyramids, BURTON ; Ex. Heir, pl. xxvii. : LEPSIUS, *Auswahl*.—Taf. vii., Pyramid of Dashour.—VYSE Journal, vol. iii.

† *Quarry-marks* of Great Pyramid ; VYSE Journal, l. c.—LENORMANT, Cercueil de *Mycerinus*.—Pl. ii. LEPSIUS *Auswahl*, Taf. xiii.—VYSE Journal, vol. iii., second pyramid.

‡ BUNSEN, *Egypt’s Place* ; vol. i, page 446.

§ HINCKS, “On the Powers of Eg. Alph.,” 1847, conceives that there was a pure alphabet, and that the complement of it was founded on the interchange of homophones.

The interchange of *homophones* is rare. No *hieratic* writing known till the xi. dynasty : the first instances being on the coffin of the queen MENTUHEPT,* and the king ENUENTRE.†

III. Epoch of National Greatness, xviii.-xix. dynasty. Introduction of a greater interchange of *homophones* (a). The Hieratic writing developed, exhibiting unequivocal traces of a *syllabic* system, and employing a less extended number of determinatives (b), owing to its less pictorial character ; but not exhibiting any nearer advances to an *alphabet*—standing in the same relation to the hieroglyphics as writing to our *print*.

IV. Epoch of Decadence, xx.-xxvi. dynasty. Commencement of a revolution in the language, indicated by a much greater number of *homophones* ; that is, the syllables which, up to that period, had been in general carefully distinguished, are promiscuously interchanged ; and many *symbolical* signs incorporated gradually into the system. This was *perhaps* consequent on the Egyptians being subjected to foreign influences, and thus becoming acquainted with the more extended systems of the Assyrian Cuneiform writings.

V. Egypt's Fall. Introduction of the *Demotic* or *Enchorial*. First appearance of partly *alphabetic* and syllabic system of more limited range than the *hieratic* ; containing still fewer determinatives, and representing the then spoken language. It is an outgrowth of the hieratic writing, which it superseded for the legal and ordinary purposes of life—the hieratic being retained as late as TRAJAN. The *demotic*, late under the Roman Empire, superseded entirely the hieratic, and was ultimately itself extinguished by the *Coptic*. It was an attempt to assimilate the Egyptian system of writing to the *Alphabetic Phœnician*.

THE CUNEIFORM WRITING,

As far as yet decyphered, appears to class as—

I. ASSYRIAN. CHALDEAN. ARMENIAN.

Phonetic.
Syllabic.

Determinative groups *preceding* ;
not following as in hieroglyphics.

II. MEDIAN.

Syllabic.

disappear.

III. PERSIAN.

Alphabetical.

No determinatives ; words
carefully divided by a wedge, or stop.

British Museum, 25th Jan., 1849.

S. B.

* A copy of this coffin, made by Sir GARDNER WILKINSON, exists in the Museum collection.

† In the British Museum. BUNSEN, Egypt's Place.

EXCURSUS

ON THE ORIGIN OF SOME OF THE

BERBER TRIBES OF NUBIA AND LIBYA.

[WITH the former number of the *Journal* terminated the series of "Lectures on Egyptian Archæology," which we announced to our readers in November last. We feel quite sure that all will admit that they have far more than realized the promises we then made in regard to them. Mr. GLIDDON has taken up the subject with so much enthusiasm that his notes and elucidations have very much exceeded, both in quantity and interest, the series of reports which forms the groundwork of the papers. The method of treatment is by no means calculated to do anything like justice to the writer, but it was unavoidable, under the circumstances, and it has at least the advantage of throwing a great amount of matter into a very limited space. These Lectures, in their present form, have been received with such favor by those best able to appreciate them, and their interest and value are so obvious, that it would be quite superfluous in us to say anything further in their praise. We shall therefore only observe, that to the general reader they give a better idea of ancient Egypt than could be obtained by the perusal of many treatises of far greater pretensions; that to those commencing the study of Egyptian Archæology, they will be found invaluable as a guide and book of reference; while to the most accomplished Egyptologist they introduce some new facts, and place many old ones in a very novel and important point of view. On the present occasion, we lay before our readers a dissertation of another kind, suggested by an argument glanced at in a former page, and which at our request Mr. GLIDDON has developed into a distinct paper. It forms an appropriate sequel to the Lectures. This will terminate Mr. GLIDDON's labors for the *Journal*, for some time to come. He is now preparing for a new series of Lectures to be delivered in America. They will commence about Autumn next, and will comprise, in addition to the latest hieroglyphical discoveries, an account of Assyrian and Persian Antiquities, embracing all the Cuneiform subjects of Persepolitan, Ninevite, and Babylonish Sculptures, as far as they are as yet understood.]—L. BURKE, Editor of the *Ethnological Journal*.

THE name BERBER, conjectured ("Ethnological Journal," No. VIII. ; note, page 344 ;) to be cognate with the Hamitico-Shemitish words, B-EREB-BAR, *the Western-Son*, or *Son of the West*, has suggested some inquiries ; in attempting to develop which I have become more than ever convinced of the importance of *Arabic*, as the most copious of Semitic languages, in elucidating many geographical names of Northern Africa preserved to us in Egyptian hieroglyphics, and in Hebrew records. Without further preface, I beg leave to submit a few of these coincidences to fellow-students of Ethnology.

The works of LEO AFRICANUS, CERVANTES DE MARMOL, D'HERBELOT, GRABERG DE HEMSO, and of my respected friends, M. D'AVEZAC and Mr. W. B. HODGSON, wherein may be found extracts from Arab historians, *El-Musoodée*, *Ebn Khâleedoon*, *Edrésee*, &c., &c., will satisfy the inquirer, that there is scarcely any new etymology, within the verge of possibility, which may not be attributed to a word that, in names of tribes (often physiologically distinct) and localities remote from each other, stretches along the face of Northern Africa from the Indian Ocean, through Nubia and the Libyan Oases, to the Atlantic.

Berber, sometimes pronounced *B'reb*, has been traced to the Arabic *BeR*, *earth*, doubled as if it were written *BeR-BeR*, "terra-terra," to imply an autochthonous origin ; or to *BAR-BeR*, *son of earth*. One need not pause on *BeRéeyeh*, Arabic *desert* :—*BeRBeKa*, to *murmur* :—*BARBARA*, a *rawler* : the Chaldee *BARA*, or the Arabic *BARRA*, *outside, without* : nor on the Coptic *BERBER*, *hot* ; which is as reasonable and gratuitous as if we were to derive *Berber* from the Turkish "*Berrabér*," *together*, "*assieme, ensemble* !"

PROCOPIUS' etymology is *BARR, terræ-geniti* ; while to the Arab chroniclers "*Berr* is the descendant of Mazing, nephew of Canaan, grandson of Ham :"—or else "*Ber*, son of Mazing, nephew of Canaan, parent of Berranis ;" (Qy., the Arabic *Barrâne*, foreigner, "*outside-barbarian* ?") :—or according to other traditions, "*Ber*, son of Kis, nephew of Aïlâm, one of the *shepherd Kings* who fled into Africa : " supposed to be confirmed by the well-known, and probably apocryphal, Greek inscription left us by PROCOPIUS, * which is said to have been found in Phœnician characters at Carthage : "*We are they who fled from before the face of the robber JOSHUA, the son of Nau.*" They are said to have been introduced into Barbary by *Afrikis*, whom my learned friend M. FRESNEL very properly considers, like *Dhou-Nawâz*, *Dhou'l-*

* "*De bello Vandalico*," lib. II., cap. 20. ST. AUGUSTINE is silent in regard to this inscription. The most critical proof in favor of its authenticity is given by MUNK, ("Palestine," note, page 81) who contends that the phrase *απο προσωπου*, *from before the face*, is not Grecian, but a translation from a true Phœnician or Hebrew idiom, as in the Greek version of Old and New Testaments : (quoted also with similar remarks by HIGGINS, "*Celtic Druids*," 1827 ; *Appendix*, page 314.) For all classical quotations on the identities between Hebrew, Canaanitish, and Punic, see WALTON, "*Biblia Polyglotta*," 1657 ; *prolegomena* ii., section 17 :—GESENIUS, "*Geschichte der Hebraischen Sprache und Schrift*," Leipzig, 1815 ; page 8, &c. :—and *IBD.* "*Scripturæ Linguaeque Phœniciae monumenta*," Lipsiæ, 1837 ; page 12 ; 63, § 45 ; and 64, E. § 35.

Karnèyn, Lokmàn, Dhou-Enòsh, &c., &c., a personification of *Bacchus*.^{*} on which hereafter. The *Berbers*, or “chi per loro,” say their progenitors were Amelekites, and also Sabæans, even drawing their pedigrees from the *Tobaïte* monarchs of Himyar. If so, their language ought to partake of *Cushite* affinities; and it is perhaps a mere coincidence that in the dialect of Zhafâr “*mbira*” means *son*; the root I fancy to be perceptible in B-EREB-Bar.

While the greater number of Arab historians derive the Libyan *Berbers* from the Asiatic Continent, it must be admitted that EBN KHALEDON contests their descent from Abraham, Goliath, Amelek, Afrikis, Himyar, &c., &c.; without adducing, however, any positive proof to the contrary: (cf. SCHULZ's translation, *Jour. Asiat.*, 1828; pages, 138 @ 139).

The derivation furnished by ABDALKER, that “*Bar*, son of Lakis Gailan, King of Egypt,” to whom the people answered, “*Bar Bar* ;” i.e., “*Bar* lives in the desert;”—and that of “Afrikin, son of Kis, son of Safi, of the Himyarite race,” who said to his followers, “*Ber Beràtcm*,”—“your country is very barren”—or, “your country is a land of wheat”—(D'HERBELOT, “*Biblioth. Orient.*,” page 185.)—more correctly perhaps, “the land is *your own land* :”—these derivations the philologist dismisses with a smile. The Hebrew word LOEZ, signifying a *stranger*, who knows neither the holy language nor the law, in the LXX. is rendered βαρβαρος; and this has been connected with “*Barabbas*,” the thief, translated “son of shame and confusion !” (CALMET, in loc.) Unfortunate *Berbers* !

The appellatives βαρβαροι, *barbari*, (said to be applied in the form *Varovaras*, or *Warawras*, by Hindoos, to *outcasts*,) barbarians, or in its pristine Greek sense more strictly perhaps *strangers*, were bestowed on the Libyan *Berbers* in very ancient times: (see *Appendix J.*) : and they are recognizable, B and V being always interchangeable, in the *Verves*, or *Verices* of Roman geography: but whether the barbarous habits of these nomadic tribes gave birth to the proper name *Berber*, or *vice-versa*, is what I do not pretend to define. EDREESSE terms *Barbary* the “land of the *Berbers* ;” and it would not be incorrect to transcribe it as *Berberia*, in lieu of *Barbaria*.

Without speculating whether the *Berbers* of *Barbary* and those of *Nubia* be or be not affiliated nations, I proceed to examine the antiquity of each.

* “*Recherches sur les Inscriptions Himyariques* :”—(*Jour. Asiat.*, No. II., Paris, 1845; p. 65.) This reference, together with that profound Orientalist's discoveries and researches into the *Ehkili* tongue, still spoken by the Mout-âribas of Mirbât and Zhafâr, the incense-country of S. Arabia, (“*Jour. Asiat.*” Dec. 1838; FRESNEL's 5th letter;) precludes the necessity of adducing reasons why, much as I admire the erudition and inquiries, I doubt FORSTER's reading of BeRBeR, on the “*Geog. of Arabia*,” 1844, vol. II., page 399.) Neither am I yet prepared to accept the antiquity claimed by Messrs. FORSTER and FRESNEL for these alphabetical inscriptions of Himyar. The analogical argument found its place in foregoing pages: meanwhile compare HUNT, (“*Himyaric Inscriptions*,” 1848;) WALL, (“*Examination of the Ancient Orthography of the Jews* :” Part II., London, 1840; Pl. 4, and pages 403 to 409, &c.) and PAUTHIER, (“*De l'Origine et de la formation des differens Systèmes d' Ecritures Orientales et Occidentales*” Paris, 1838; *Ethiopic Alphabet*, page 580; and *Sanscrit* idem, page 584.)

The modern Nubians ostentatiously boast that they are *Berberri* in the singular, and *Baràbera* in the plural. To them *Berber* is a term of honor. *Berber* is still the capital of Upper Nubia; and hierologists are aware that conquered Nubian families, whose name is orthographed BRBR in the legends of HORUS, SETHOS-MENEPHTHA, RAMSES-MAI-AMON, read by ROSELLINI BaRo-BaRo, and by me simply *Baràbera*, are extant as far back as the middle of the xviiith dyn., say the sixteenth century B.C.: (cf. BIRCH, "Gallery of Antiquities, part II., pages 68, 86, 104.) We thus prove that people of this name, whose lineaments are exactly similar to the Nubians of the present day, occupied the same localities above Egypt, some 3,500 years ago.

In sculptures of the same age we find a Nubian divinity, called in the hieroglyphics BARO, (ROSELLINI, M.R., vol. III., part I., pages 350, 372, 392; part II., page 28, &c. :) and it is known that the word NuB,* *gold*, is the root of *Nubia*, from that region's proximity to the auriferous provinces of the Upper Nile, Fazzòglu, &c.: (see my note in MORTON, "Crania Ægyptiaca," 1844, page 50; and for all information and the best *maps* of these golden vicinities,—which 4,000 years ago attracted the avidity, and the Nigritian expeditions of Pharaohs of the xith and succeeding dynasties, as in A.D. 1839 of *Mohammed Ali*,—vide RUSSEGER, "Reisen in Europa, Asien und Afrika," Stuttgart, 1841-5.) But this name NuB is likewise that of another Nubian deity, still more mysterious, *Noub*, *Nubti*, *Nubei*, (Seth? Num?); whose phonetic designation sometimes presents us with the same radical *doubled*, as ΔΟΥΒ-ΝΟΥΒ. May there not be a similar duplication of the name of the God BARO in that of the Nubian people, the *Baro-Baro*, or *Berbers*?

It must be borne in mind, notwithstanding, that this name, which ROSELLINI reads BARO, (compare *Nubnub*, part I., pages 303, 304,) is now considered, with apparently sufficient reason, to represent that of the Asiatic divinity *Baal*: (BUNSEN, "Eg. Place," pages 426, 415, 450:—HINCKES, "Hier. Alphabet," page 43, and fig. 100.—Consult, on the *twelve Baals* of Scripture, identified with the mystic figures in the *Obscene Papyrus of Turin*, LANCI, "Paralipomeni," vol. II., ch. vi., page 75, et seq.) Nevertheless, it does not seem quite clear how an Egyptian Pharaoh should be likened to a *foreign* Deity, "victorious like *Baal*," &c.; and, whether we read L or R, the name is spelled in four different ways; thus, ROSELLINI, M.R., Pl. xliv., fig. 2, BARU; liv., fig. 1, BAR; lvii., BARE; lxviii., BAIR.

It is perhaps a mere accidental coincidence, that the *Baro*, "a very large river," and the *Birbir*, a tributary of the Godjeb, together with the "country of *Berri*," *Barry*, *Bér*, should still be appellatives in the *Berber* regions of the Upper Nile: (BEKE, "Nile and its Tributaries;" Jour. R. Geog. Soc., 1847; vol. xvii., pages 41, 47, 69, &c.—IBID., "Origin of the Gallas," 1848; page 6.) The same root is perceptible in the River Astaboras, *Asta-BAROs*? I owe this idea to Mr. W. D. NASH.

* — Cf. BUNSEN'S reading of GnUB, Nubia, instead of our unintelligible *Chub*, in Ezekiel xxx., 5; ("Egypt. Stelle," ii, page 6;) and other very ingenious philological connexions of the hellenized name *Canopus*; *Akah-n-NOUB*, "the land of Gold"—in LANCI ("Lettre à M. PRISSE," 1847, pages 119, 135, 138, 150, 151). Mr. SHARPE suggests in preference, *kah-n-Num*, "City of (the God) *Chnoumis*," or *Knouphis*.

Turning our attention to Barbary, we find it maintained by an excellent authority, (GRABERG DE HEMSO, "Specchio geografico e statistico dell' Impero di Marocco," Genova, 1834, pages 251, 296, &c.,) that the *Amazirghs*, descendants of the Mazigs, *Masici*, the most ancient inhabitants of the Ghârb from the Nile to the Atlantic, never heard the name of *Berber*, by our author considering an atopism of the adjective barbarous, *Barbari*, previously to the year A.D. 694; when the Spanish Jews, fleeing into Africa, styled such of their co-religionists as had been previously established there, those whom European writers had called "the Philistines of Barbary," by the depreciatory title of "Yehood-el-Berber," the Jews of Barbary. Moreover, that no Jewish, Christian, or Muslim historian uses the word *Berber*, before the second century after the Hedjra;—that the Greeks and Romans, "non si sa troppo perchè," and afterwards the Arabs, gave to these Amazirghs the name of *barbari*, or barbarians, whence *Berberi* became their foreign appellation. The Moors call them B'RABER, or *Berâber*.

They are undoubtedly the Μαζυγες of Herodotus, (lib. IV., 191,) traceable in the *Mazici*, *Maziccs*, *Macæ*, *Macii*, and other Roman corruptions of the indigenous name *Amazig*, *Imazig*, &c.: (CASTIGLIONE, "Recherches sur les Berbères Atlantiques," Milan, 1826; pages 89, et seq.: also D'AVEZAC's article on *Berbers* in the "Encyclopédie Nouvelle," vol. I., sub voce., B and M being interchangeable letters, it is just possible that we might read *Barbarica*, *Barbaridæ*, *Bauri*, instead of *Marmarica*, *Marmaridæ*, and *Mauri*, in Libyan geography? BERTHOLET, ("Guanches," *Mémoires de la Société Ethnologique*; Paris, 1841; Tom. I., part I., pages 130 @ 146; and 1845, Tom. II., part II., pages 83 @ 111;) has satisfactorily demonstrated the consanguinity of the unfortunate inhabitants of the Canary Isles with the *Berbers* of Libya; and if they could reach the Islands of the Atlantic, the same people may have occupied others in the Mediterranean, particularly Malta.

This is somewhat confirmed by Acts xxvii., 2, 3: where St. PAUL calls the inhabitants of Melita "barbarians" (*Berbers* ?); a term scarcely in keeping with their humane reception of shipwrecked voyagers. Nor is mention made of any *interpreter*, which is quite in accordance with what is known of the close relationship between Hebrew, Canaanitish, Punic, and probably Berber dialects: (but compare 1 *Corin.* xiv., 11; and consult NEWMAN, "On the Structure of the Berber Language," apud PRICHARD, "Researches into the Physical History of Mankind," vol. IV., *Appendix* 2.)

Having myself spoken Maltese before I could converse in English, I can attest that the present inhabitants of Malta use a mongrel language so full of *Môghrabee* Arabic, that a Maltese and a Barbaresque can perfectly understand each other. They both represent physically and linguistically the relics of an earlier people, who seem to have been in part a Berber affiliation with a Phœnician superposition: (LENORMANT, "Cours d'Histoire Ancienne," 1838, pages 280-1.)

While better classical scholars than I pretend to be must decide whether, in ancient Greek and Roman writers, the words *βάρβαροι*, or *barbari*, by us rendered as the adjective and noun *barbarian*, may not sometimes mean lite-

rally the proper name of the nation *Berbers* (?);* the historiographer of these Moghârba tribes, himself a Berber, EBN KHALEDON, (3rd Book, on the "Kabaîl el Berber,") says of their speech, "*Wa loghâtehum min el-RUTANET el-ADJEMEYYET*,"—and their tongue is of the *foreign* (i.e., not Arabic, and therefore barbarous!) *gibberish*." The whole passage runs—"Their tongue is a species of barbarous jargon in which several dialects are distinguished: it is this language which gave rise to their name:"—(SCHULZ, translation of "History of the Berbers"—*Journal Asiatique*, 1828, Tom. ii, page 118).

In this connection how many epithets, applied by strangers to foreign nations, and by the former perpetuated as if they were really indigenous nomenclatures of the latter, are either unknown to, or when known, disavowed by the *natives* themselves! *Frank*, Arabicè *Frâncee*, Hindostanicè *Ferinjee*, if a title of honor in Gallic tradition, is now applied by the Muslims to all Europeans, English or Russians, as a term of contempt; although in the time of *Francis I.* it was simply the Osmânlee for a *Frenchman*. It is from the all-grasping acquisitiveness of the *Avares* that we derive our adjective "avaricious," although in their language the name signified *noble*: but the most curious of these phenomena is perhaps met with in the word *Schlave*. Of yore, individuals of the vast *panslavic* migration, which, anciently as at the present hour, (DE BROTONNE, "Filiation des Peuples," vol. I., page 349, &c.) unable to force a passage westwards through the Teutonic barrier, was compelled by the "vis a tergo" of still fiercer marauders to form a geographical semi-circle to the East of German races, captured and sold in Roman slave-bazaars were called by their proper name *Sclavi*, Sclavonians, which in their own tongue meant *glory*, *illustrious*, *heroic*, according to BALBI,—("Atlas, Discours Préliminaire," 1826, pages 33, 34;) and PRICHARD, ("Researches," 1841; vol. III., pages 404.) We inherit its misapplication in our word *slave*. And to carry out in this example the strange vicissitudes that words have undergone, accidentally or through design, in the process of translation from one tongue to another at different ages, by reference to CAHEN, ("La Bible, traduction nouvelle, avec l'Hébreu en regard," Paris, 1834-47:—the best, if by no means a faultless translation of the Old Testament,) and to SHARPE, ("The New Testament translated from Griesbach's Text," London, 1844,) the intelligent reader can easily verify how, in almost all those instances where our vulgar English version has the word "servant," the original Hebrew has *AbēD*, *slave*, and the original Greek *δουλος*, *slave*: a fact hitherto too much disregarded by ethnographers. (See *Postscriptum*.)

So it is with the Arabic appellatives *âdjem* and *rotâna* above quoted. The former, in ante-Mohammedan periods when the chief commercial relations of the Bédawee tribes of Yemen, Omân, Hadramaut, Nejd, Irâk, &c., were limited to the Persians, was applied by the Arabs to the inhabitants of Irân,

* The reverse seems to be called for in HESIOD's "Memnon,—king of the *Æthiopians*:" which, instead of being translated as a geographical name, and in consequence sending the student on a fruitless hunt after this fabulous or mythical personage among the Negroes of Africa, if rendered "king of the sun-burned-faces," becomes a generic term, the ethnographical description of any *swarthy* Asiatic people, who may have accompanied their chief to the fabled siege of Troy.

in its sense of *foreign*, as the strangers "par excellence;" yet in the colloquial *Dariq* of Cairo, by the designation *âdjemee*, or Muss'ree *âgemee*, the Egyptian now-a-days means a Persian to the exclusion of any other people. Is it not possible that the misuse of the term *âdjem*, understood as a Persian when it literally means a *foreigner*, may have given birth to the legend that *Persians* settled in Barbary? (See D'AVEZAC, "Bulletin de la Soc. Géog.," 1840; Tom. xiv., page 227.)

The tradition that *Persians* immigrated into Barbary rests, I believe, on the authority of SALLUST, ("Jugurtha," § 18;) and is supposed to receive confirmation from the name of the Libyan tribe *Phaurusians*, *Pharuses*, &c. (PLINY, V., 8; and STRABO, xvii., § 7; note in French edition, vol. V., page 460;) in which the word *Pharsee*, Persian, is perhaps discernable. Unable to comprehend how *Persians* could have reached Barbary without leaving on the route some trace of their passage, I accept this merely as another legend which attributes a foreign (*âdjem*) and Asiatic origin to some if not to all branches of the *Berbers*.

With respect to the latter, the dialect current among the Amazirghs of Ghadâmis is called "ertana" by BALBI,* on the authority of LYON, who says it is thus termed by the natives. Now, in Arabic, *rut'âna* means a *jargon*, and *rutâna* a *mixed tongue*. It is a depreciatory designation applied by exotic Arabs to idioms whose articulations are in sound uncouth to their auricular nerves, and cannot therefore be the indigenous name given to their own speech by native occupants of Ghadâmis, or of any other region.

The same principles will doubtless account for some misapprehensions current in relation to the word *Berber*; but with respect to its antiquity in Africa, whether it be a name indigenous to the Amazirghs or not, the otherwise ingenious objections of GRABERG DE HEMSO fall to the ground the moment we prove, from the monuments of Egypt, (ubi supra,) that a similar people, equally "gentes subfusi coloris," existed in Nubia and Austral Libya, 3,500 years ago, as their descendants do unto this day, registered in hieroglyphics as the BRBR, *Barâbera*, or *Berbers*. And this is one of a thousand instances at hand which ought to convince future writers on African and Asiatic ethnography, that to leave aside the discoveries of the *Cham-pollionists* in these questions, is "to act the play of Hamlet, the part of *Hamlet* being left out by particular desire:" (*Chapters*, pages 39, 31:—see also on *Berbers*, pages 42 and 47:—and for the most perfect representations

* "Ertana ou Tounarick"—BALBI, "Atlas Fœderalis," 1826; *Mappe-monde*, "Langues Africaines," Pl. i., and Pl. x. . . . Atlantic *Berbers* Pl. xviii.; Nubian *Barâbera*, Pl. xvii.; *Guanches*, Pl. xvii. and xviii.—IBID. "Introduction," pages 204, 207, to 212.—IBID. "Abrégé de Géographie," 1833; pages 89, 888, 889;—also CASTIGLIONE, "Berbères," page 112.—Cf. HODGSON, "Notes of Northern Africa, the Sahara, and Soudân," New York, 1844, page 25. It is owing to the valued friendship of this gentleman, the most accomplished Orientalist of the United States, that my inquiries were directed to these Berber affinities: see IBID. pages 13, 33, and 63: also his previous paper, "the Foulahs of Central Africa," 1844, page 18:—MORTON, "Crania Ægyptiaca," page 38:—PRICHARD, "Appendix to the Natural History of Man," 1845, pages 557 to 560: and PICKERING, "Address to the American Oriental Society," Boston, 1843, pages 14 to 21.

of *Nubian*, *Bishárree*, and *Abâbde* families at this day, consult the beautiful Plates of PARSIS, "Oriental Album," 1846-8.)

A fortunate accident placed my own investigations on a different track.

Mr. R. K. HAIGHT of New York, to whose beneficent co-operation I am proud to acknowledge myself debtor for the transatlantic and Parisian facilities of study I have enjoyed since 1842, in the course of augmenting his choice archæological library, purchased at Paris, in 1843, a very curious French *Manuscript*, by an anonymous but most proficient Orientalist, apparently compiled in the reign of Louis XVI.; that is, prior to Napoleon's Expedition to the Levant of 1798. It is an Essay, in answer to the inquiry—"Quelle a été, pendant les trois premiers siècles de l'Hégire, l'influence du *Mahometisme* sur l'esprit, les mœurs, et le gouvernement des peuples chez lesquels il s'est établi?" There are some marginal notes, by another hand, attributed to SILV. DE SACY, which enhance its value; but, written by whomsoever it may have been, this Manuscript was penned by a first-rate Arabic and Turkish scholar; because the technical expressions, "tournures de phrases," he adopts at every page, are such as no *European*, who had not resided for a long time in the East, and held direct intercourse with Arabs and Turks in their own tongues, could have perceived; while few could have literally *jammed* so much information into the same narrow space. One example of this nicety of appreciation will suffice for the Orientalist.*

The Arabian Muslimèen, in devout resignation to the volition of Omnipotence, incessantly utter the sentences "In-shà' Allâh," *if God wills*, "Mâ-shà' Allâh," *what God wills*, reverently and in humble doubt as to the result that Providence may accord to their prayer.

Very different is the enunciation of these pious ejaculations in the mouth of the imperious *Turk*; who still encamped amid the ashes of once-populous Empires his blood-reeking sabre has rendered desolate—a hated *foreigner* in all realms that still writhe beneath his agonizing grasp—while he usurped the dominion and much of the language, took naught of piety from the Arab but his "*odium theologicum*."

To understand how, where, and when this scourge of humanity arose, and the fearful part the *Turkish* race has played in history, (of which it seems to be the *tiger-clement*,) together with the philosophical argument exhibiting the immense action of the Osmânlee as a stimulus to European civilization, compressed by the Turkish barrier into a limited area of development, the reader must consult *Chinese* annals, beautifully unfolded by JARDOT ("*Révolutions des Peuples de l'Asie Moyenne*," Paris, 1839). I question not the

* In adverting to that critical discrimination which betrays the thorough Orientalist "malgré lui," I derive real satisfaction, quite refreshing inasmuch as it so rarely falls in my way, in recognizing among the grand merits of Mr. LAYARD's "*Nineveh*," its author's accomplishments as a skilful portrayer of *Ottoman* and *Arabian* peculiarities. Wherever a Turk discourses, the niceties of his expressions are rendered into English with marvellous exactitude; while none but those who have actually lived among Arabs and Bedawees could have so faithfully delineated their national habits of speech. I regret that want of space obliges me to limit this tribute of Oriental recognition to a glance, for some delicious *Turkicisms*, at vol. I., pages 44, 46, 68, 74, 76, 142, 159, 163, 233, 237; and for well-defined *Arabisms* to page 58, and Chapter IV., *passim*.

political utility of this circumscribing force ; although since the time of the Empress CATHERINE it has ceased to operate. There was a Sect in early Christianity that worshipped the memory of *Judas Iscariot*, on the plea that, if he had not betrayed the Saviour, the world could not have been saved. (Cf. STRAUSS, "Life of Jesus," in loco.)

The Mongol-Tartar,* parent of the present ruler of Byzantium, had pastured his horses on the remote banks of the *Ili*, for unnumbered ages before, as the HIAN-YUN, his predatory propensities attracted Chinese attention about the twelfth century, A.D. Thence accompanying his sanguinary rise to power and dire career of spoil and foray through Central Asia ;—as the HIOUNG-NOU, B.C. 200 ; THOU-KIU, whence *Turk*, A.D. 552 ; merging through the plundering HORHE and HAKAS into the conquering SELJOOK, about A.D. 1000 ;—we behold the OTTOMAN ; much altered physiologically owing to amalgamation with the hapless females of Greece, Circassia, and Georgia, if but little in his moral characteristics ; a barbarian on the outskirts of civilizations he can never accept ; tolerated by political sufferance and the international jealousies of European powers ; whose remorseless tyranny is borne with curses loud and deep by all populations under his rule, amid the still-echoing shrieks of slaughtered *Nestorians*.

"O nation inhuman, rapacious, and vile !
At once the reproach and the scorn of the Nile ;
As he reddens ashamed of the alien Race,
And his tide curls in anger at Egypt's disgrace !
What avail thy rich harvests, thy deep-bedded glebes,
Thy ~~rich harvests~~ or thy wool-growing meads,
O, ~~Land of the Nile~~ ! The sons of thy soil
For the *Stranger* must till, for the *Stranger* must toil."†

* RASHID ED-DEEN, vizir of GHAZAN KHAN, compiled a history of the Mongols, ostensibly from their own traditions, which must have comprised many apochryphal accounts ; inasmuch as *alphabetic writing*, derived by them from contact with Syrian Christians, was unknown to Mongolian hordes until the time of GENGHIS KHAN, A.D. 1210 : (PAUTHIER, "De l'Origine et de la Formation des differents Systemes d'Ecriture Orientales et Occidentales," Paris, 1838, page 587-8.) His work became the authority to subsequent Eastern historians ; especially to ABOO'L-GHAZEE in A.D. 1654. The latter endeavoured to attach the ethnologically and geographically-distinct traditions of the Mongolian race to the genealogical system of the Jews, as introduced, with manifest alterations, into the Arabian *Kur'ân*. "JAPHETH, son of NUH (Noah,) went (says he) towards the East ; and it is from him that descend the people of these countries, divided afterwards between two brothers, TARTAR-Khân and MOGOUL-Khân."

All this is fabulous in itself, besides being contradicted by *Chinese annals* : (JARROT, vol. ii., page 5.) These unhistorical *origines* of nations are now adverted to, as a prelude to the discussion of the xth chapter of Genesis, (see "Ethnol. Journal," No. VI, note, page 254,) whereby it will be demonstrated that, under the personifications "Shem, Ham, and Japheth," their fifteen sons, and seventy-two grandchildren, the Hebrew geographers, whose ken of the Earth's superficies was even more limited than that of ERATOSTRACHES, about B.C. 240, have never alluded to, nor intended, Mongolian, Malayan, Polynesian, American, or Nigritian races. Albeit, I agree with ROSELLINI, "la serie dei nomi de' discendenti di Noè è una vera ricenzone geografica delle varie parti delle terra ;" ("Monumenti Storici," vol. I., page 8 ;) so far as the world's surface was known to the Savans of Jerusalem : at what probable age will form part of the contemplated exegetical inquiry.

† Posthumous poems by the late JOHN GLIDDON, U.S. Consul for Egypt, Cairo, 1842. They embody the feelings with which the Egyptian Arab regards the present as well as any future Osmanlee dynasty.

Accustomed to crush opposition with his iron *topoor* (Turkicè, *mace*), and defying all obstacles but a bayonet's point, the Arab phrases "In-shà Allàh," and "Mà-shà' Allàh," in the mouth of a real Turk no longer signify "if God wills," and "what God wills," but are uttered with the tone and air of *certainty*; as much as to say "*I will it.*"*

To bring the case home by a parallel illustration. Our English word "guess," current in England in its Johnsonian sense of "to conjecture—to judge without certain principles of judgment," when transferred to the United States bears, in common parlance, the signification of "certainly, without doubt, to be sure." And as a familiar example of how *proper names* become changed by transportation to different countries, let us instance the story of JOHN FLINT, an English emigrant, who, settling in Pennsylvania, found his patronymic translated by the Germans into FEURSTRIN. Unsuccessful in his operations in that State he moved into Louisiana, where the French colonists named him *Pierre à fusil*; and in later days he departed this life in New England as the lamented PETER GUN! †

This sample of the Oriental discrimination of the unknown author, to bring which within the comprehension of the English reader has led me into some prolix digressions, is one of many that display the Eastern knowledge of the writer of Mr. HAIGHT's manuscript. He gives, moreover, appropriate extracts from the best Arab authors, among them *Ebn Khalegàn*, *Ebn el-Raqqeq*, *Hüdjee Khalëefa*, *Edrësee*, *El Makrëzee*, *El Mäsoodee*, *Ebn Khäledoon*, &c. &c.; and it was their perusal that suggested many new ideas to me, leading insensibly into various fields of research; through which, during a summer's recess from lectureship in 1844, I stumbled upon what I

* Perhaps the reader doubts? Let me convince him by "*quæque ipse miserrima vidi.*" During the terrible plague of 1835, the provinces of the Thebaid were recusant or the Mammoors dilatory in the transmission of the taxes to the Treasury of Cairo. MOHAMMED ALI promulgated a Firmàn, which, while it threatened the extreme of *Egyptian* in case of further delay, contained the following Arabic sentence: "*fa là ie-qooloo In-shà'-Allàh wa ba-Izn-Ilàh, latn Allàh tà ànd'hoo dàawà kullëan fëeha :*" "and say ye not if God wills, and by the permission of God, because God has nothing whatsoever to do with it." A copy is on file among my papers.

† Excellent remarks on the changes that have taken place in national tongues, together with the rules to be followed in discriminating between the physiological race of a given people, and the language spoken by such people, may be consulted in BALBI ("Atlas,—Discours Préliminaire," pages 75 to 86). In African philology and orthography the most extraordinary transmutations of sounds and letters have occurred, so as to justify or invalidate almost any hypothesis. Thus, Cannibals are "severally called *Remrem*, *Lemlem*, *Demdem*, *Yemyem*, or *N'yumn'yum*." (W. DESBOROUGH COOLEY, "Negro-land of the Arabs," 1841; pages 112, 135.) It would be easy to prove that in African nomenclatures all the letters of the alphabet have been transposed, in the course of passing from one language to another, during some 3,000 years of monumental and written history. If to all these accidents be added the blunders of copyists, and the difficulties of Semitic and especially Arabian orthography, when so much depends upon a *point*, the reader, for whose gratification these pages are written, will benevolently concede that *lapsi* are inherent in these disquisitions; remembering the most humane of all Scriptural texts: (1 Corinthians, xiii, 13.)

believe to be the *key* to the xth chapter of Genesis. A fragment of these results may not be unwelcome to the reader.

Two families of man, outnumbering at this day in Marocchine territories alone three millions of population, one aptly described as the *French* and the other the *Belgians* of Africa, (GRABERG DE ILEMBO,) very distinct in habits and appearance, and comparatively unmixed with each other, dwell along the Northern face of the African continent from the Oasis of Ammon to the Atlantic, under the generic name of AMAZIRGH, *Mazirgh*: (sometimes with the Hamitic feminine article T prefixed or suffixed, as T-*amazirgh*, or *Amazirgh-T*.) They are reputed to have imbibed little alien blood from contact with Phœnico-Carthaginian, Greek, Roman, Vandal, Arab, Jewish, or Nigritian amalgamations;* and are respectively known as the SHILLOUHS and the BERBERS. Both were comprehended probably in classical geography by the name of *Masyes*, *Masiges*, *Mazici*, &c., whereby the Latins softened the rigidities of AMAZIRGH; meaning *free*, *dominant*, or "most noble race."

The *Shillouhs*, whose occupation of Barbary is sufficiently ancient to be lost in the night of time, would seem to be *autochthones*. The *Shillouhs* themselves say they are Aborigines of the Móghebre-el-ácsa: also that their ancestors, besides using the Berber idiom, wrote and spoke in "Qelâm Aboo-Melek," the speech of Abimelech, or rather of the *Amekite*. They speak a language called *Shilha*, (see the vocabularies of my valued Egyptian colleague, KÆNIO; apud JOMARD, "Résumé des Voyages,"—Soc. Geog., 1839, Tom. IV., page 130, &c.: and HODGSON, ubi supra, pages 33 @ 35;) which commences at the Oasis of Seewah, intermingled with Arabic† now from contact with Egypt, as in the days of Herodotus, when the *Ammonians* were said to be a "colony of Egyptians and *Ethiopians*," (lege, not Nigritians,

* D'AVEZAC, "Esquisse générale de l'Afrique," 1837, pages 45 to 47.—IBID, "Bulletin, Soc. Geog.," Tom. 14, 1840, pages 227, 228.

† Here I would observe, that the vocabularies I have seen, except the concise but very accurate ones of Mr. HODGSON, such for instance as SHALER's of Berber tongues, are full of *Arabic*; especially in all words implying *civilization*. More discrimination ought to be used to separate the palpably exotic from the indigenous tongue. This fault is remarkable in European accounts of other *African* languages. "Their common enemy is the *Arabic*," observes one of the most qualified of African explorers; RICHARDSON, ("Travels in the Great Desert of Sahara," 1848, page 228, &c.) I was much amused last year by finding, in the so-called translation of the "First three Chapters of Genesis" into the *Soochelee* Language, by the Rev. Dr. KRAFF, that, if the *Arabic* terms of civilization be deducted from their contents, there remains little beyond a mere barbarous jargon! (see "Journal of the American Oriental Society," No. III., Boston, 1847, pages 261 to 274.) I have often thought that instead of wasting time in the manufacture of new versions from a corrupt Original, for wild tribes that will never read them, it would perhaps be more expedient to correct our own: on the innumerable errors in which see the laments and vain appeal of KENNICOTT, ("Dissertation 1"—1753-9,—*Introduction*, and page 567:—"Dissertation II.," pages 579 to 588:—) of BELLAMY, (New translation of the *Bible*:—"General Preface," and remarks *passim*;) and besides infinite other proofs before me of the loud call for a new version, let the following *title* suffice for the critical reader; "The HOLY BIBLE, containing the *Authorized* version of the Old and New Testament, with TWENTY THOUSAND Emendations (!)"—(London; Longman, Brown, and Co., 1841.) I have examined this corrected translation on some important particulars, and find the old mistakes perpetuated with exceeding great fidelity.

but "sun-burned-faces,") their language partaking of both. These Ammonians are the ANAMM, of Gen x., 13 ; (here I differ entirely from LENORMANT, p. 245 ; CALMET, and the generality of commentators ;) and owing to the infusion of Egyptian blood, were probably a fairer race than the Nas-Ammones of Herodotus, the *Nahsu-Amonians*, Negro-Ammonians, of Mr. BIRCH : (" On the Hieratical Canon of Turin," *Note*, page 6.) CASTIGLIONE affirms, that of the names *Macæ-Ammonii*, or *Macæ Amnii* (*Amazig-Ammonians*) the Greeks made *Mesammones*, and thence *Nasammones*. The worship of Amun was not confined to this Oasis, but extended over Libya : (" *Berbères*," page 91.)

On turning however to biblical commentators, to seek for the geographical habitat of the *Casluhim*, KSLHim, Gen. x., 14, (the sentence is wrongly punctuated in our version,) the reader is made to travel from the Eastern provinces of Lower Egypt, as far as *Cholcis* on the Euxine in the hopeless chase. By restoring the Hebrew letters of that verse to their primitive MS. state, "uno ac perpetuo ductu," rejecting the modern Masoretic points as not invented till the sixth century A.D., and disengaging the plural IM, we may read *Kah-Shi-LuH-im* : the counterpart of what a hierogrammatist would have written SHILOUH-kah, "Land of the SHILOUHS," or *ShiLHa* ; whereby this name takes its natural place in the Oases, and indicates one of the most ancient and widely-spread families of Barbary. Their cognomen is easily identified in the designations *Zilia*, *Zilis*, *Zelis*, *Zilca*, *Salinsi*, *Zilzactæ*, *Massyli*, *Xilohes*, *Μασσαιλιβες*, or *Amazig-Libyans*, and *Massæsyli*, or *Amazig-Shillouhs*, of the kingdom of Fez, &c. in ancient classical geography, and modern maps. EBN KHALEDOUN expressly declares, that the *Berbers* "descend from *Kesloudjim*, son of Mizraim, son of Ham : " (SCHULZ's transl., pages 140-1.)

I dwell not on the generic name of all Barbary in Gen. x., 6, *Phut* (who, be it observed, has no *children*, alias colonies,) *PhoUT*, *Fout*, (softened into *Fàs*, *Fez*, in Morocco,) the ancient *Futeya*, *Phouti*, &c. of the Maps ; still preserved among the more distant Foolahs of Africa, in *Foota-Jallon*, *Foota-Toro*, *Fouta-Bondou*, *Foota*, &c. : (see the very erudite inquiries of my excellent friend, D'EICHTHAL, "Histoire et Origine des Foulahs"—Soc. Ethnologique, Paris, 1843 ; vol. II., pages 7 @ 9, 140 @ 146.) This name is common enough in hieroglyphics as *PhuT-kah*, the "*bow-country*," the generic name of Libya, as in Nahum III., 9. It is here adverted to, to distinguish it from the specific name of tribes more contiguous to Egypt, with which it has been confounded by HENGSTENBERG, and by many besides LENORMANT (pages 235 and 245). I allude to the *Naphthuhim*, Gen. x., 13 : NPTHim. It is ludicrous to read what the old commentators make of them ! By re-dividing the word into *NiPhaiaTuH-im*, we obtain the Coptic transcription of the Egyptian name for nomad tribes of the Western skirts of Lower Egypt, *NIPHAIAI*—now driven far into the desert, from the once-populous vicinities of Lake Mareotis ; since the introduction of the Mediterranean waters by our army, at the siege of Alexandria, between March and Sept. 1801, converted that far-famed wine-growing province into a salt marsh. And we talk self-complacently of *French* devastations ! *Niphaia* is the plural of *PhET*, or *PhuT*, signifying in hieroglyphics a *bow*, as well as the phonetic

sign for the letter PH; which, coupled with *the segment of a circle T*, followed by *nine units*, and the sign *kah*, country, (*Chapters*, p. 41,) yields us in the plural form NI-PHAIAT-KAH—the *Phaiats'-land*, or “country of the nine bows;” which is faithfully handed to us in the Hebrew map as *Niphaiatuhim*: families of Αἰθνη, Libya; *Moghreb-el-bwel* of the Arabs: offshoots or colonies of the MITZRAIM, the *two Mus'srs*, Upper and Lower Egypt, personified in Gen. x., 6, 13: which the learned HINCKS has shown to be the TO-MuTeRI, “the land of the *two Egyptis*” of the monuments: (“Hieroglyphic or Ancient Egyptian Alphabet,” before quoted, 1847; page 28, Pl. I., fig. 73.)

Irreducible as these names have hitherto been by the learned in Rabbinical literature, all the descendants of the mythical *Ham*, KHeMe, are perfectly explainable, now-a-days, by the hierologist familiar with Egyptian discoveries; although this is not the place to continue the parenthetical exposition. I stop therefore with the *Pathrusim*, PTRSim, Gen. x., 14. If known to classical geographers in the forms *Pathros*, *Peihouris*, and by biblical commentators erroneously restricted to the Thebaid, even were it so in modern and ignorant Coptic times, (PEYRON, “Papyr. Græc.” Pars II. page 57,) these branches of the Hamitic family are the *Phi-Tho-ReoS-im*, literally *the-world-south*; that is, Austral-Libyans, the people lying to the south of Amonians, Shillouhs, Phaiats, &c., of Barbary; into the composition of whose name the Egyptian word REES, *south*, (CHAMPOLLION, “Dictionnaire,” pages 212, 218, 403:—IBID, “Grammaire,” pages 267, 278, 297, 396, 496,) entered, when the original map of Genesis was constructed, in the same manner as it did in later Coptic times, when Egypt south of the Delta bore the designation of MA-REES, the *southern place*; whence, at this day in the winter months blows the *meREESee*, as the Fellâhs of the Nile still denominate the *south* wind.

I pass on to the second division of the *Amazirghs*, viz.; the *Berbers* of Libya.

Such traditions as they possess point distinctly to a Canaanitish derivation, to which their language also bears an intimate relationship: (CASTIGLIONE, pages 93, 94, 98, 125, 127;—NEWMAN, apud PRICHARD, IV., 587, and *Appendix II*:—IBID., “Nat. Hist.,” pages 272 @ 265:—and NEWMAN, “Trans. Philol. Soc.,” vol. I., page 144.) They are called the *Philistines* of Barbary, and in xth Gen. 14, are distinctly averred to have issued as the *Pelishtim*, (hieroglyphicè, POLOSTOI; CHAMP., “Gram.,” page 180:—perhaps the unaccountable shepherd *Philitis* of Herodotus, who pastured his flocks around the Pyramids in the Western Desert?) signifying, in Hebrew lexicography, *Emigrants*, αλλοφυλοι, from out of the *Castuhim*; i.e. the *Shillouhs* of Barbary as above shown, to them still cognate nations. But the history of Philistia,* in Palestine, is very obscure: (see on the *Philistim*—MIGNOT, “Mémoires sur les Phœniciens”—Acad. R. des Inscr. et B. Lettres, 1770, vol. xxxivth., page 148, et seq.) and there must ever be the uncertainty whether the traditions of these African *Berbers*, like

* I have read the “notices” by QUATREMBRE of MOVERS’ “Philister,” although they are not now before me. The original, I grieve to add, is beyond my reach.

those of the Mongols, were not written for them, "après coup;" and whether these Philistines of Libya are physically of the same stock as the Philistines of Canaan. As yet ethnological science has not decided if the *Berbers* of Nubia be affiliated more than in nominal similarity with their namesakes of Barbary: nor again, in the affirmative case, can we readily comprehend how we should find the *BeRBeRs* already domiciled in Nubia, long prior to the expulsion of the Canaanites by *Josua*. The subject is hedged in with dilemmas: and in consequence, having no theory of my own to propose, I offer the following coincidences, "sub judice," as crude elements of a discussion in which, *if* (and there is "much virtue in *if*,") the *Berbers* of Libya be deemed of Canaanitish descent, the points I now inquire into will additionally corroborate such hypothesis.

Under the Chapter on *Berbers*, in a curious description of the domains already subjugated by the sword of Islâm, given by a sage to the Caliph OMAR, Mr. HAIGHT'S Manuscript treats on the provinces of Barbary, with extracts from EL-MASOODËE and from EBN KHALEDÛN, himself a *Berber* and the historiographer of his nation: (3rd book—"fi akhbâr el *Berber*," on the annals of the *Berbers* :) followed by an account of their partial subjugation by *Moosa ben Nassr*, in the reign of the Caliph WELLED I.; who, to give these restless warriors better occupation than revolts, despatched 20,000 of them under TARIK EBN ZEJAD into Spain, in advance of his Saracenic chivalry.* And their subsequent importance is evident from the well-known fact, that most of the African Dynasties, after the 10th century, were *Berbers*, who had adopted the creed and tongue of the Arabs.

Among these Arabic passages I was greatly struck with a list of twenty-five *Tribes*, into which the *Berbers* were subdivided four centuries ago; whom tradition, at least, respected by their national chronicler, (no mean authority,—see SPRENGER'S "*Masoudi*," 1841, vol. I., page 13, et seq.,) derives from Canaan, where *Gialoutiah*, Goliath, was their king; and who in very ancient times settled in the Mógħrehb, at Belounge and Makariba. *Gial'out* is considered to be a generic title of royalty, like *Pharaoh*, PHRA, *the king*: (D'HERBELLOT, page 364.)

I instituted in 1844 some comparisons between these cognomina of the "kabâil el-*Berber*," and other authorities, the substance of which is submitted at foot; but it is essential to premise, that it is difficult to present their transcription in English orthography: at the same time that probabilities militate against the assumption of some of them, as they are given in Mr. HAIGHT'S MS., because many variants occur in the different copies of EBN KHALEDÛN. (Cf. the critical observations of TORNBERG, "*Narratio de Expeditionibus Francorum*," Upsal, 1840.)

The general principles of my remarks will not be materially affected by

* These Western Arabs are termed *Moghârba*; and as another proof of the practical knowledge of the anonymous author of this Manuscript, he says, that, among the Arabs, the name of "*Moghrabee* (literally a 'man of the Għarb,' or West Barbary,) is synonymous with *Magician*." I noticed the same fact in respect to that *Impostor* at Cairo, who has so egregiously duped the simplicity of European, and particularly of English travellers: ("Appeal to the Antiquaries," 1841, page 136.)

these variations, and the original MS. not being now before me, some oversights may be mine. Our anonymous author seems to make use of a *Turkish* translation of EBN KHALEDON, —by *Perrizadé Mohammed*, under Ahmed IIIrd. ; —comparing it with MASOODÉ, xliiird chapter. I have no means of checking these names but through their transcription in the works so often cited ; particularly in SCHULZ's translation of the "History of the *Berbers*," by EBN KHALEDON : (*Journal Asiatique*, 1828 ; Tom. ii., pages 117 @ 142).

I place these names seriatim, in the order in which they stand in Mr. HAIGHT's MS. The Orientalist need not be reminded that they are presented to us in the Arabic *plural* form ; just like many of the geographical personifications in the Hebrew Text of Gen. x., especially in verses 13 and 14.

1.—ZENATE—Beyond the fact that families with this patronymic still inhabit Barbary I have little to offer. The *Zenetas* are one of five grand partitions of the Berbers, said to have been originally Sabæans of Arabia : ("L'Afrique de MARMOL," trad. *Perrot*, 1667, Tom. i., page 68 :) the "quinquegentani *Barbari*" of Roman writers of the 4th century A.D. : (CASTIGLIONE, pages 100-1.) LEO AFRICANUS adds "subfusi coloris sunt ;" ("Africa Descriptione," 1556, p. 5 ;) which was and is still the color of the *Cushite* Arabians, the true ÆTHIOPIES, or "sun-burned faces," of Hebrew geography and of Homeric ages. The *Zenetah* (Hobson, p. 35.) may be of the Amelckite race ; but, based upon the analogies submitted in the sequel, which throw various "families of the KaNA&NI" into Barbary, after they were "spread abroad," (Gen. x., 18,—hieroglyphicè KANANA,) I would inquire if these ZINàta are not the SINI, *Sinites*, of Gen. x., 17 ? They are the *Sintes*, *Sintites*, of classical geography.

2.—HOWARA ;—one of the same five branches of Berbers : and without question the *Hôrîtes*, HOR-îm, (Gen. xxxvi., 20, 22 ; Dent. ii., 12, 22 ;) Troglodytes, primitive inhabitants of the Scîr Mountains, now called *El-Shêrah*. D'AVEZAC ("Esquisse," page 80,) also connects them with the "divine *Aurîtes*," now represented by the Berbers of *Aouryah* : identified by BERTHOLET, ("Guanches," i. 68,) with the *Haourythes* of the Canary Isles, and descended from the *Aurighah*-tribe of Atlantic Berbers. They gave their name to *Abaris*, and to the province *Abaritana*. These nomads still visit the confines of Egypt. The Pyramid of *Howàra* in the Fayûm is named after them, even if of erst it was the tomb of TaU-MERE, ("Ethnol. Jour.," No. VII., page 308 ;) and to this day, from their skill in equitation, breakers-in of horses are at Cairo called *Howàra*. During MOHAMMED-ALÎ's campaigns in Syria, large bodies of Barbaresque *Howàra* served as irregulars ; as I have had other occasions to remark. [See one of my many letters, dated "Alexandria, (read Cairo,) 26th March, 1841 ; and, in *that* day, considered by H.M. Ambassador at Constantinople to proceed, although my name be suppressed, "from a person extremely well acquainted with what is passing in the country ;" no less than worthy of insertion in a dispatch from Lord PONSONBY to Viscount PALMERSTON, "Therapia, April 7, 1841." It is printed, with numerous typographical *sphalmata*, in the "*Parliamentary Papers* ;" Session, 19th August to 7th October, 1841 ; vol. viii., page 393. Among

other blunders of the printer, in lieu of "*Sakal hales*," (repeated in page 394,) which is nonsense, read *Sukkat hales*; by which every Fellah understands what in English may be paraphrased, "an inviolated veteran, thoroughly used up."]

3.—LIVATHE, or LAOUATA—possibly the plural form of *Ladut*, *Lahwutta*? but as I cannot clearly distinguish its analogies from those of the following No. 11 (*Laoute*), I class it provisionally under that head. Orientalists are however aware, that the Arabic letter *wow*, U, O, OO, W, V, frequently becomes dialectically F, or PH, P, B, &c. Ex. gr. HIRAM-ABIF, (1 Kings vii., 14; and 2 Chron. ii., 13,) so celebrated in Masonic rites,* meaning literally HIRAM-his-Father. Written with the same letters, ABU, the last dissyllable of this name is pronounced by an Arab ABOO, or *Aboo-hoo*: and it would by a Copt be written and pronounced ABEF; while in hieroglyphics it might take the form APEF? (Cf. LENORMANT, "Hist. Ancienne," Appendice II.)

If it be allowable, then, to read the Arabic word *LeBatha*, and instead of the first vowel to substitute a soft *he* as this name occurs in some MSS., *LHBatha*; on detaching the Arabian plural we should have the exact counterpart of *LHBim*, *Lehabim*, of Gen. x., 13; whence the *Λιβυη*, *Libya* of the Greeks, and the *ⲗⲓⲃⲓ* of Coptic MSS.: (CHAMP. "Eg. sous les Phar.," 1814, in loc.) The *LUBim*, *Lubim*, by commentators supposed to be *Nubians*, cognate with the *Phut*, (*ubi supra*.) in Nahum iii., 9, and 2 Chron. xvi., 8, may be thus identified with the *Leouatha* or *Beni-Lewa* of the Arabs, the *Λευαδαί*, *Λεβανδαί* of PROCOPIUS, and the *Languantan* of CORIPPUS?

4.—KOTAME, ~ ~ ~ ~ ~? They are the *Ketamah* in SCHULZ; one of the main tribes of Berbers, and like the *Sinhadgians* reputed to have immigrated from Yemen.

5.—NESZE—Are not these the NAHSI, *Nahasu*, of the hieroglyphics? Nigritian Berbers? They must have been considerably darker in complexion

* Cf. the "Lexicon of Freemasonry," Charleston, S. Ca., 1845, pages 136, 187; by my accomplished friend Dr. ALBERT G. MACKAY, S.G.I.G., 33, &c. Also, RIGHELLINI, "La Maçonnerie, considérée comme le résultat des Religions Egyptienne, Juive et Chrétienne," Paris, 1842; Tom. i., page 97; together with many other parts of his four volumes, for the mythological connexions of the hapless *Hiram*. Much masonic information, amid frequently erroneous views, may be collected from FELLOWS, "Exposition of the Mysteries—of Egyptians, Pythagoreans, and Druids," New York, 1835.

Although not "one of the free and accepted," I have studied that which is accessible to the profane with extreme interest, as well as the *Kabbala* of the Hebrews; and I hope some day to demonstrate the archæological utility of a retrogressive inquiry, through the *moyen age*, by the aid of these sciences, into the opinions current at Alexandria, Jerusalem, and Babylon, back to the *Chaldean* and *Assyrian*. In the interim my best acknowledgments, for their encouraging remarks, are offered to Mr. JOHN H. SHEPPARD, of P. H. P. and K. T., (author of "Address— to the Grand Lodge and Chapter of Maine," Boston, 1844; pages 37, 50, 52;) and to Mr. THOMAS PRYER, S.G.I.G. 33, ("On the Study of Masonic Antiquities," Freemasons' Quarterly Review, London, March, 1847, pages 3 to 11, and 13, 14.) —G.R.G., of the American I.O.O.F.

than others of their race to entitle them to this distinguishing appellative; because on the monuments the *Nahasu* are decidedly Negroes. See their portraits in the tomb of *SETHOS-Menephtha I.*, (ROSELLINI, Pl. M.R. 160; Text, Monti. Stor., vol. iii., part 2, pages 105, 174, 447 :) and in that of *RAMSES-MAIAMUN*, (IBID., Pl. M.R. 157; M.S., vol. iv., page 243: with other examples and remarks in Pl. M.R. 159; M.S., vol. iv., page 233; and vol. iii., part 2, page 105. Compare also *CHAMPOLLION*, "Lettres d' Egypte," 1830, page 249;—*LENORMANT*, "Histoire Ancienne," pages 319 @ 324;—and the more critical observations of *BIRCH*, "Gallery of Antiquities," part 2, page 95.)

6.—*ZERNOUDJOUME*, ? *Werfadjoume* ?

7.—*MOGHAILE*, ? *Moghair* of the Tuaricks, in the Oasis of Mozàb ?

8.—*DARIZE*,—sons of *Dhari*; (see *Appendix I.*, voce *Dhara*.)

9.—*MASMOUDE*; probably the *Muṣamrudins*, one of the five parental tribes of Sabæan Berbers, whence "600 lineages of Berbers;" apud *MARMOL*, (page 68,) and *LEO AFRICANUS*, (page 5.) Parents of the *Ghomera*, apud *SCHULZ*.

10.—*SADINE*, ? *Saddinah*, apud *SCHULZ*.

11.—*LAOUTE*. Mentioned above, in No. 3. These are certainly the *Loud*, *LUDim*, eldest issue of the *Mitzraim*, the *two Mussrs*, Egypt, in Gen. x., 13. On maps of Barbary, this name constantly meets the eye; and in history we encounter the *Lout* in the varied forms of *Lot*, *Oloti*, *Autololi*, *Eululi*, *Toloti*, *Autoloti*, &c. There are still *Oluti* or *Oloti* among the Amazirgh families. All admit the national prefix *Ait*, "sons of;" like *Mac*, *Fitz*, *O'*, *Ap*, among ourselves. In the Periplus of the Carthaginian *AMON*, they figure as the *Ait-olot*, sons of *Lud*; Arabicè *Beni-Loud*; *Ludayas*. *Lod*, *Lydda*, *Diospolis*, in Arabicè *Loudd*, was a town east of *Jaffa*: (1 Chron. viii., 12, &c.) Again a Canaanitish affinity is perceptible.

12.—*NUKOUSHE*. We need not hesitate in recognizing here the word *KOUSH*, with the Coptic or Hamitic plural *NI* before it; by which *CHAMPOLLION* transcribes the plural form of *KuSH*, the generic name for Nubian, Nigritian, and Austro-Libyan nations in the hieroglyphics; the *KHOOSH*, *Nekoosh* of Coptic literature: ("Eg. sous les Pharaons;"—or "Dictionnaire," pages 408, 409; "Grammaire," page 150, &c.) It has been already maintained, that *three* distinct divisions of mankind, *CUSH*, *KuSH*, and *CHUS*, are often confounded in ancient geography: (*Ethnol. Jour.*, No. VI., note, page 254.) The Hebrew *CUSH*, generically the *Cushites* of Southern Arabia, a dark *Caucasian* family, in no part of the text crosses the Red Sea into Africa; and its nearest approach to Egypt is the boundary line between Asia and Africa, on the Isthmus of Suez, viz., "the *Torrent of Cush*," other-

wise the "streamlet of Mitzraim;" the "torrens Ægypti," *Besor, Corys*, 'Wādee el-Arish;" the winter brook, or *Sēyl*, which divides Syria from Egypt at Rhinocorura: (cf. ROSELLINI, "Monti Civili," vol. ii., pages 394 @ 403; on Isaiah xviii., 1, 2.) Our vulgar version, in this as in hundreds of similar instances, follows the LXX.; substituting *Ethiopia*,* whence part of the geographical confusion of ideas; for this term was not, in Ptolemaic times, exclusively and specifically applied to countries or nations south of Egypt; but was current in its generic sense of "sun-burned-faces;" (ubi supra.) After the Christian era, *ETHAUSH* is its homonyme in Coptic MSS.; apparently limited by Coptic ignorance to the Nubias; with which regions the anterior *Cush* of the Hebrews has not the slightest relation. *LE-NORMANT* (page 232,) is probably right in denying that the Greeks derived their *Αἰθιοψ* from the later Coptic *ETHOSH*; the reverse being more natural, especially as in both the Semitic root *ETH*, *fire*, is traceable: although my friend Prof. LANCI suggested to me, 1846, that *Ethaush* is compounded of of two Arabian radicals, *HEET*, *form*, and *ABES*, *to be black, swarthy*, &c.

Be that as it may, *WILKINSON* ("Topog. of Thebes," page 487—*Gerf Hos-sēyn*, Tutzis,—) treats of *Thaush* as the Coptic name of a town in Nubia, now called *KISH* by the natives; and philologers know that nothing can be more vague than vowels in Semitic tongues, and how easily *S* is transmuted into *SH*: Ex. gr. *Shibboleth*, *Sibboleth*, Judges xii., 6. Even in hieroglyphics *KUSH* is spelled in different ways; *KeSH*, *KASH*, *KeSHI*, (*HICKES*, "Hieroglyphical Alphabet," page 16; Pl. i., figs. 23, 26, 27;) and besides undergoing all kinds of vocal metamorphoses in the mouths of different tribes, at different epochas, this name has doubtlessly been translated in divers modes by foreigners, some referring it to Nubia, others to Libya; some to Arabia, and others even to Hindostan, where Brahmanical geographers have two "lands of *Cush*,"—"Cusha-dwipa within," Eastern, and Asiatic; "Cusha-dwipa without," S. Western, or African: (*FABER*, "Origin of Pagan Idolatry," vol. II., page 487;) but, lest these coincidences should be derived through some *WILFORD*, I never allude to Hindoo subjects save in fear and trembling. What can be more indeterminate than the geographical application of the names *Indian*, or *Scythian*, except *Ethiopian*?

While claiming, therefore, that the Egyptian scribes by their hieroglyphical and Hamitic designation *KUSH*, referred exclusively to *African* races; and that the Hebrew writers, by their Semitic name *Cush*, referred exclusively to *Asiatics*; I by no means doubt that the Arabian Cushites crossed the Red Sea into Abyssinian provinces in very remote times; where many of their descendants, in numberless mulatto grades, dwell to this day. On the contrary, this immigration is an essential element in history; for details of

* Among the Rabbis we encounter the same confusion of ideas between the Asiatic and African *Ethiopias*. Thus, *ABARBANEL* thinks that what the *Sepher Hatachar* says of *MOSES* may be true, viz., that before his sojourn at Midian he reigned 40 years in *Ethiopia*, married an *Ethiopian*, &c.: (*CAHEN*, note to Exodus ii., 15.) However apocryphal this legend may be, by reading *Cush* and *Cushite* as the Hebrew tradition stands, it is plain that Southern Arabia, and an Arabian woman, are meant; instead of the preposterous notion that *MOSES* had dwelt in Upper Nubia, and married a *Negress*! I shall resume this subject hereafter.

which the reader is referred to FORSTER ("Hist. Geog. of Arabia,") no less than to the excellent researches of JOMARD, FRESNEL, and other distinguished Arabian inquirers of this century.

Reports of my oral lectures (Philadelphia *Ledger*, 16th, 23rd Jan., and 6th Feb.: Baltimore *Sun*, 11th March, 1845: "Southern Literary Messenger," Richmond Va., July, 1845, pages 8, 9:) have placed on record that it is with me no new opinion, whilst striving to discriminate between these heretofore conflicting data, that the xxvth Manethonian Dynasty, of *three* so-called "*Ethiopian* kings," SHABAK, SHABATOK, and TAHARAKA, of the sculptures, in whom no *Nigritian* lineaments are perceptible, (ROSELLINI, "Iconografia," M. R. Pl. xii., Fig. 47, 48; xiii. 49:—MORTON, "Crania Ægyptiaca," Pl. xiv., Fig. 16, 17, 18.—Text, pages 47 @ 49;) are perhaps the descendants of an earlier Asiatic-*Cushite* immigration into Meroë, via Abyssinia, whence they descended the river to the conquest of Egypt. Their *portraits* prove that they were not, nor are they ever called, the KUSH, *Nigritians*: neither do they express the true Pharaonic cast of feature. Dr. MORTON terms them *Austro-Egyptians*; and it is to be remarked, that we have no monumental evidence that their dominion was irksome to the denizens of Egypt, otherwise so revolutionary under a foreign yoke: which I opine to proceed from their being of the cognate *Hamitic* family of nations, (Gen. x., 6,) whom I conjecture, "sub judice," to be painted *red* on the monuments: (see HOSKINS' *colored* plates of the Tomb at Thebes, age THOTMES III.; or WILKINSON, "Man. and Cust.," vol. I., pl. iv., page 364, et seq.)—a *color*, of which I have seen no negative proof that the Egyptians ever gave to populations who were not connected with themselves, in blood or through traditional origin. I speak of *populations*, the "*profanum vulgus*," advisedly; because all "*de facto*" rulers of Egypt, Persian? Greek, and Roman sovereigns are colored *red* out of compliment, like the autochthonous Pharaohs: which is another proof that the *color* on monuments had no relation to that of Egyptian skins: inasmuch as the Grecian PHILADELPHUS, and the Roman AUGUSTUS are equally painted crimson like their Pharaonic predecessors; from the same mythological reason that A-DaM is literally "*the-red-man*;" *red* being, with all primitive nations, the honorable color "*par excellence*." (Cf. PORTAL, "Couleurs Symboliques;" and LANCI, "Paralipomeni," vol. II., on *Aleph-tau*, &c.)

That a *foreign* dynasty has ruled Egypt, in ages anterior to any Greek authorities, is rendered more than probable by Mr. BIRCH's researches upon the *Bubastite* Dynasty; ("Observations on two Egyptian Cartouches, &c., found at Nimroud,"—Trans. R. Soc. Lit. 1848, Vol. III., part I; pages 165 @ 170: and LAYARD, "*Nineveh* and its Remains," 1849, vol. II., pages 203 @ 215.)

In a letter to Dr. MORTON, ("Philæ, 15 Sept., 1844; Proceed. Acad. Nat. Sciences, Philadelphia, Jan. 1845;) and still more in extenso in another of the same date to our lamented friend, the Hon. JOHN PICKERING of Boston, Prof. LEPSIUS announced several important philological discoveries of his own in Nubian ethnography; from which, in part, I drew some of the foregoing conclusions. He found *three* distinct languages in those vicinities:—

- 1st.—The NUBINGA, or *Nouba*, “strangely called *Berber*,” spoken in three dialects along the Nile, from Aswân to Southern Dongola; and likewise in parts of *Kordifal*, as the natives pronounce Kordofân.
- 2nd.—The KENGARA, language of Dâr-fôor, a Negro tongue, very widely spread, although its name was previously unknown.
- 3rd.—The BEGAUIE, *Bégàwee*, idiom of the Bishârriba, [the *Béjas*, *Bojas*, *Βουγιαίται* of the Axumite inscription; the ancient *Blemmyes* of the Romans; *Bal-n-Moui* of Coptic MSS. (CHAMPOLLION), and the *Bal-em-to*, or *Iri-m-to*, of the hieroglyphics in the Nubian conquests of SETHOS I., [BIRCH;] who occupy the wilderness from Lat. 23° to 15°, and in greatest force the fertile district of Taka.

This last, by far the most important of Nubian tongues, is grammatically *Caucasian*. Dr. LEPSIUS undertakes to prove that the ancestors of the Bishârriba built the Temples and Pyramids of Meroc; none of which antedate the second century B.C., and descend to the third century after our era. They imitated Egyptian style, coloring, hieroglyphics, and art, in their sacred, historical, and sepulchral monuments; but they wrote also in a species of *Ethiopian demotic*: (see my communication to the R. Soc. of Lit.; London 25 June, 1846; *Proceed.* vol. I., No. 16.) I infer that the tongues of which my valued friend, the Abyssinian explorer, Dr. BEKE, has given vocabularies, belong to still more austral regions of the Upper Nile; nor do I omit NEWMAN’S caveat, that the *Barâbera* of Nubia are a distinct people from the *Berbers* of Libya;—a point that *philology* alone can never settle: (see these gentlemen’s respective papers in *Trans. Philological Soc.*; vol. I. and II., 1843-5.)

This digression will convince the reader of the innumerable questions suggested by, and the solution whereof is dependent on, the results of pending inquiries into *Berber Origines*.

Now, do all these Caucasian and Nigritian races come under the generic term KUSH, on the monuments? I entertain the contrary opinion; because wherever the KUSH are portrayed they are not painted *red*, but in shades ranging from light brown to the deepest black, exactly as the varied *Barâbera*-families who congregate in Cairo are seen at the present hour.

The NUKOUSHE or *Nikoush*, then, of EBN KHALEDON may be, for aught we can yet assert, either descendants of the biblical or Arabian *Cushim* transported into Africa; or else Austro-Libyans, aborigines of Africa, whom the Egyptians stigmatized 3,500 years ago by the phrase, KUSHI-ni-kah shafte rôtes hoou, “the perverse race of the barbarian lands of KUSH.”

A glance at a map of Barbary will point out a multitude of names in which one of the above two designations is apparent—KIS, KESH, *Cus*, *Cusa*, *Susa*, *Cus-i*, *Coushi*, *Cossii*, *Succosii*, &c. &c. Are they the ZUZim? (Gen. xiv., 5.)

Some of the facts brought forward under this head may interest the ethnographer. Alas! I fear that, so far as the existence of the name *Nukoushe* among the Atlantic Berbers be concerned, they rest upon a sandy foundation;

because in other MSS. the name reads *Nefouseh* or *Nefoosheh*! (SCHULZ, page 302; and CASTIGLIONE, page 104; the *Nefusa*, *Navusi* of CORIPPUS.) The whole question turns upon the most insignificant triviality—a mere *dot*! If there be *two dots* over the Arabic letter, it is a *coph*, K, and *NuKoushe* is correct; if but *one*, then we have a *fè*, F, and the name reads *NeFoushe*.*

13.—MEZANE ~ ~ ~ ~ ?

14.—ENINE—— ~ ~ ? As a bare conjecture, and through the license of the anagram adopted by FORSTER, if an M be substituted for N, we might have here the *Anamim*, *ANMim*, *Amonians* of the Oases? (Gen. x. 13.) Or, inasmuch as we have found the *Horites*, and other Canaanitish families in Barbary, these may be their associates the *Emim*, i.e. *formidables*? falsely rendered “giants” in some versions. (Gen. xiv., 5: Deut. ii., 11.)

The latter have been confounded with the *ANaKim*, vulgarly supposed to be *giants*! The text of Scripture shows that these “children of *anak*” were scattered all over Palestine. If to the word *ANaK* the reader will prefix the Phœnician masculine article *Ph*, *the*, he will perceive it to be quite natural, that *CALEB* should find the *Ph-ANaKim*, *Phœnicians* in Phœnicia, in those days; whose civilization and skill in the art of war should render them *formidable* enemies to the invading nomads of Israel. In Numbers xiii., 22, and other places, the unpunctuated text has *ILIDI HANaK*; rendered the “children of *Anak*,” but the prefix *H*, or demonstrative particle, is suspected by CAHEN to precede a *proper name*: (Note to Numbers

Those acquainted with the endless polemical disputations about a *masoretic point* will not doubt the uncertainty that herein hinges upon an Arabic *nugta*. Nor is it in *Arabic* literature alone that we encounter such dilemmas. “But besides this, another most important passage, bearing upon the same dogma, is in a still more curious position. This is 1 Tim. iii. 16, where a serious dispute exists, whether we should read, “God appeared in the flesh,” or “*who* appeared in the flesh;” and this dispute has been not only contested with the pen, but has literally been made the object of microscopic investigation. For it turns upon this; whether the word in the most celebrated manuscript be *OC*, *who*, or *ΘC*, the abbreviation for *θεος*, God. Now, the pronoun and the abbreviation are the same excepting in the transverse stroke, which, passing through the *Θ*, distinguishes it from the *O*, and in the line drawn over it, as a sign of abbreviation. Some, for instance, assert that in the celebrated Alexandrian manuscript of the British Museum, these lines are added by a later hand; all agree that they have been most imprudently retouched. Others have maintained, that some remnants of the original stroke might be seen in a strong light, with the aid of a good lens; and their opponents again rejoin, that it was only the transverse stroke of a letter on the other side of the page, which appeared through the vellum, when raised to the sun. In fine, this dispute has been continued, and the passage positively handled, till strokes and letters, retouchings and originals, have been equally cancelled, and the decision for posterity must rest on what judgment it can form amid so many conflicting testimonies.” (Rev. Dr. WISEMAN, “Connexion between Science and Revealed Religion;” London, 1836; vol. II., pages 168, 169.—“*Who* was made manifest in flesh,” is the Text of GRIESBACH, apud SHARPE; “*New Testament*,” page 382. See the whole discussion in PORTER, “*Principles*,” &c., pages 482 to 493.)

xiii., 22, in "La Bible, traduction nouvelle.") The Hebrews called HANAKIM the same Phœnician people who termed themselves PHANAKIM; in either case the-Anaks.

15.—WARIKA. *Aurighah?* The Amazirghs make use of the determinative articles *d*, *dh* in the masculine, and *t*, *th*, in the feminine gender: (Hodgson, page 20.) With the article prefixed we read D-WARIKA, *Tuaricks*, a widely disseminated Berber nation in Africa. Mr. BIRCH conjectures that these might be the *Waruki*, (?) in the list of African captives on the "Pedestal of Statue of Amunoph III."

16.—KAILE ? in SCHULZ, *Kailàn?*

17.—OMARE, Aâmare. These are the AMORI, *Amorite*, (Gen. x., 16,) so famous in Hebrew annals: and the AMORI, EMORI, of the hieroglyphics among Asiatic captives of the Pharaohs, (BIRCH, "Gallery," page 86, &c.): likewise the *Emori* of HINCKS ("Alphabet," page 13; Pl. I, fig. 17), found as early as the age of MENEPHTA I., of the XVIIIth dyn., say the 15th cent. B.C.—In hieroglyphics, the "Land of Omar," (ROSELLINI, M.S., vol. III, part I., pages 368-70; vol. IV., pages 94, 237, 239, &c.; M.R. LIII., &c.)

Written with the letter *âin* of the Arabs, *gnâin* of the Hebrews, not transcribable with our occidental alphabet, and unpronounceable by the generality of Europeans, these *Omarî* have much bewildered ethnologists; because, even in the East, this initial letter, in different provincialisms, partakes of the varied sounds of *â*, *ô*, *qâ*, *kâ*, until it is hardened into a G, as *gâ*.

Called *Gomer*, one of five original stocks of Berbers, by MARMOL (page 68), and by AFRICANUS (page 5), inattention to this philological principle has led English writers, first to read the AMORI as *Gomera*, and then to make these Hamitic people descendants of *Gomer*, (Gen. x., 2,) eldest son of Japheth, and thus to find the Indogermanic *Cimbri*, Κίμριοι, *Celts*, in Libya at the remotest ages! A glance at the Hebrew text indicates the distinction; the former having an initial *aleph*, the latter a *gimel*.

Gomera, probably also *ômera*, is a Canary Island, once inhabited by the *Guanches*; who are, with much plausibility, conjectured to have been affiliated with the *Berbers*, these *Omeri* of Libya.—(BALBI, "Atlas Ethnographique," Pl. xvii., and xviii.—PRICHARD, "Researches," vol. I., pages 249, 527.) The name *Canaries*, *Canariî*, is a corruption of *Gômera*, or rather of *ômera*. These Isles are the "*Gannaria extrema*" of PROLEMY's chart; and the *Ghomerites* were one of the principal tribes who valorously opposed the Portuguese in the fourteenth and fifteenth centuries: (BERTHOLET, "Guanches," I., page 165; II., page 129.)

18.—ZEBARE. *Zemour*, apud SCHULZ. Substituting M for B, as is perfectly legitimate in Oriental philology, we read ZEMARE, and see in them the TsMRI, or *Zemarite?* (Gen. x., 18.)

19.—ERKYE; and here we have their fellow Canaanites, the ERKI,

Arkite? (Gen. x., 17.) *Eregeiah* of HODGSON, (pages 12, 26 @ 31.)
Tuaricks? This name is variously written in different MSS.

20.—WESHOUN —? Of these I can make nothing. If this were a name, (like *rutana*, *adjem*, &c., ubi supra,) given to them, we might find in it the Arabic *wēhesh*, bad, applicable perhaps to their propensities; but more probably the word *WAHSH*, *wild*, to indicate possibly the more savage Berber tribes of Libyan deserts; in which latter case the correct pronunciation would be *wahshēyēen*; although the true plural is *wahdosh*.

21.—SANHADJE. The *Sinhagiens* of MARMOL and AFRICANUS, one of the five original tribes of Sabæan *Berbers*. HODGSON, (p. 35.) says, "how important it would be to show, in the traits of the *Semhadjah*, the ancient race of Yemen." Fully agreeing with my learned friend, his accuracy in the transcription of Oriental names, inasmuch as he spells *SeMhadjah*, where our MS. reads *SeNhadjah*, is a valid argument in favor of my use of the anagram in the above ENINE, No. 14. "The Berber name *ZeNAGhaH* was corrupted by the Arabs, as Ibn Khaldūn informs us, into *SiNHAJaH*, pronounced in the West *Sinhāgah*:" (DESBOROUGH COOLEY, "Negroland," pages 2, 18, 66.)

22.—KELAN —? *Khalān*, *Ailān*, *Varkalān*?

23.—MENHOUSE ~ ~ ~? Is the province of *Haoussa* part of this name? In Coptic or Egyptian (a cognate Hamitic tongue,) *MAN* signifies *place*, *plain*, *situs*; an ancient form still preserved in Egypt in names of villages—as *MAN-SHEEYEH*, the *place of the marsh*. The *Stadium* of Alexandria that now connects the quondam Isle of Pharos with the main land (since my residence in Egypt covered with new houses, *Ibraheem* Pasha's buildings, &c.) used to be called *el-manshēyeh*, the *place of the marsh*, by the present Arab Alexandrines; being the Coptic *MANSHEEI*, *stagnum*, *palus*: (PARTHEY, *Lexicon*, in loc. :) such, until 1830, having been its state every winter after the rains. This observation is due to Mr. A. C. HARRIS.

24.—ODAIHIN ~ ~ ~?

25.—BASDEZNAN, ~ ~? *Bazdarān*, apud SCHULZ. *Asjūnan*, *Azjūnān*?

Thus, out of twenty-five names of *Berber* nations left us by EBN-KHALEDON, who at this day inhabit Barbary as they did many centuries ago, *eight* of them have been identified with the names of Canaanitish tribes, some of whom claim a Hamitic affiliation; viz.: the *Sinim*, *Horim*, *Lehabim*, *Ludim*, *Anamim*, *Amorim*, *Zemari*, *Erki*, of Hebrew geography; and the probability of the Asiatic immigration of some of the others pointed out. More skilful hands, by verification of the MSS. of EBN KHALEDON, and better acquaintance with Oriental history and geography, may continue the work;—one which I deem of exceeding importance to the hierolo-

gist in elucidating the still obscure localities and names of Libyan nations extant on the monuments : but having shown the utility of *Arabic* in these inquiries, and that it is in Semitic languages we find the most useful implements of analysis, I presume that as some tribes of the *Berbers* have Canaanitish names, and the language of Canaan was almost identical with Hebrew and Phœnician, there is no material objection to my etymology of the cognomen of the *Berbers* themselves, B-EREB-BAR, *the-Sons-of-the-West*: descendants of a primitive migration from Asia into African regions *West* of Canaan. At a future day and more leisure moment I hope to return with other materials to this interesting subject. [PRICHARD, ("Natural Hist. of Man," 1843 ; pages 262 @ 265,) sustains that the researches of NEWMAN prove the grammatical construction of *Berber* tongues to be "a very ancient form of the Semitic or Syro-Arabian languages."—IBID, "Researches," vol. I., pages 241 @ 249 ; IV., page 587 ; and *Appendix* II., by NEWMAN, pages 617 @ 626.—NEWMAN, "On the Berber Language of Mount Atlas," &c., pages 134, 144 ; *Philological Society*, vol. I., 1843.]

In making use, almost interchangeably, of the ethnographical terms *Hamitic* and *Semitic*, I am guided by the plausible hypothesis, that these generic names designate *two* immigrations of *Caucasian* groups of nations, from an unknown but probably a common source in primitive trans-Euphratic regions, westwards, first into the "Gézêret el-Arab," Isle of the Arabs or Arabian Peninsula, and thence via Palestine into Africa ;—groups of nations, I repeat, divided from each other, rather by long intervals of time between their respective migrations, than through aboriginal diversity of physiological conformation. These principles have been more or less developed in, or can be deduced from, the works of LEPSIUS, MORTON, LANCI, BUNSEN, KENRICK, LENORMANT, and particularly of DE BROTONNE, ("Civilisation Primitive," Paris, 1845 ;) but by none have they been made manifest on the scale, or with the immense synthetical co-ordination of my friend, and preceptor in these archaic inquiries, M. HENRI VENEL, of Geneva, in the MSS. of his gigantic conception, "Chronos :" (see *Appendix* to tenth @ twelfth editions of "Chapters," Philadelphia, 1846.)

Under this view I have not as yet encountered objections to the arguments of LANCI, ("*Paralipomeni* all' illustrazione della Sagra Scrittura," &c., Paris, 1845,) in favour of the remote antiquity and common adoption, among these two originally-cognate families of mankind, the *Hamites* and *Shemites*, of the primeval masculine articles P, PH, B, and *Aleph* A, as well as of the feminine T, TH, D, (in all cases Anglicè "the,") prefixed or suffixed to pristine monosyllabic and *bi-grammatical* nouns. When any such objections appear, it will be quite time enough to take them into consideration.

In the meanwhile the critical Hebraist, who will consult this profound philologer's disquisitions, can readily satisfy himself, that, in the remains still extant of ancient *Hebrew* literature,* the archaic particle A is prefixed to

* See PARKER'S "*De Wette*" (Boston, 1843, vol. 1, Appendix A), for the catalogue of the *lost* books of the Jews. "LEUSDEN enumerates the words that occur in the Hebrew (and Chaldee) Bible, at 5642. In Greek there are about *eighty-thousand*:" (GESENIUS, in PARKER'S "*De Wette*," I., 459.) From this fact we

about *forty* substantives of the masculine, and to but *two* of the feminine gender; at the same time that the article T, so familiar to the hierologist, governs above *ninety* feminine nouns, and scarcely *six* masculine. The masculine article P, of the Egyptian "sacred tongue," and Coptic, is likewise frequently a component element in Israelitish, as well as in Punic nouns; especially in *proper names*. I have not, therefore, hesitated to make use of them in the preceding analysis of Canaano-Berber appellatives.*

Nor have I deemed this the place to enter into the *exegetical* investigation of the Books of the Hebrews; because I postpone the inquiry to a more complete treatise upon the ethno-geographical *chart* contained in the xth Chapter of Genesis, on which I have herein merely submitted a few novel points by anticipation. Even the ordinary reader, divesting himself of the fallacious notion that our present divisions into *Chapters* and *Verses*, nay

may judge how little now remains to us of the ancient tongue of the Israelites; which, as a dialect of the "Ocean" of Arabian idioms, must have been nearly as copious as *Arabic*; reputed to be the most so of all human languages: but until Mr. ED. W. LANE publishes the mighty Lexicon he has been at work upon for years, I cannot hazard a definition of the amount of words in the latter.

"La plupart des langues (Européennes) ont à-peu-près trente milles mots. Si, l'on peut ajouter foi aux calculs de Héron dans son ouvrage sur la langue Anglaise, l'Espagnol en aurait trente mille, le Français trente-deux mille, l'Italien trente-cinq mille, l'Anglais trente-sept mille;" (MICHELET, note to Vico, vol. II. page 69.)

Hebrew "was essentially the language of the Canaanitish or Phœnician race," (page 23:)—"The name *lingua sancta* was first given to the ancient Hebrews in the Chaldee version of the old Testament, because it was the language of the sacred books, in distinction from the Chaldee, the popular tongue, which was called *lingua profana*;" (page 23:)—"The Hebrew tongue is *only one of the members of a large family of languages in Western Asia*;" (page 17:—CONANT's *Gesenius*, "Hebrew Grammar," 14th ed., New York, 1846.) And, illustrating the doctrine embodied in a quotation from LANCE, ("Ethnol. Jour.," No. VII., Appendix C;) let me refer the reader to the excellent observations of WALTON, ("Biblia Polyglotta," 1657, *prolegomena* III., page 17,) or to KENNICOTT, ("The State of the *printed Hebrew Text*," Oxf. 1553-9, pages 95, and 528.) See a variety of confirmatory views in MUNK, on the "Inscription *Phénicienne* de Marseilles;" (*Journal Asiatique*, Dec., 1847; pages 473, 483, and 526.)

* CASTIGLIONE, on the authority of VENTURE, asserts that the letter B never enters into words of Berber or Amazirgh derivation, being softened in *ou*, or *w*: (page 110:) which *wa*, or *w*, is considered to be a "degenerate article" by NEWMAN; (apud PRICHARD, vol. IV., page 621.) It is also the article, (IBID, page 622,) prefixed or affixed in Berber names, is the *aleph* article; while "the prefixed *aleph* in the Berber names is the sign of case, and may have other offices;" (W. DESBOROUGH, "On the Berber Language," pages 6, 98.)

Now, all these authorities assign an *Asiatic* origin to Berber tongues, under different names, Shemitish, Syro-African, &c. LANCE's unequalled researches into the *archaic* articles of Arabian languages amply confirm these linguistic deductions; even to the frequent *doubling* of the articles, as in the *Arabian*, (PRICHARD, IV., 622;) in the same erroneous manner that Europeans are in the habit of saying "*the-Alcoran*;" forgetting that the word *Kur'an* already possessed its prefix, *el*, *the*. It need not be remarked, that the absence of the specific sound B in Berber tongues does not affect my etymology; for, whilst in Amazirgh dialects we find its equivalent in WA, OU, or W, the name "*Western-Men*" may have been given by remote Arabian nations to the *tribes* of the *Western* into Barbary. The Egyptian Arabs cannot pronounce the letter P, which they harden into B, as *Bashee*, for the Ottoman and Persian *Pashá*; but not on that account is not the old Sahidic article P, or Memphitic PH, extant in hundreds of names of modern Nilotic topography.

sometimes into *words*,* are anything but arbitrary and modern, can perceive, that the specification of the TOLDoTh BeNI-NoaH, *the descendants of the sons of Noah*, otherwise the xth Chapter of Genesis, breaks in *parenthetically* between the end of the ixth and the beginning of the xith; and that its omission would rather sustain the historical thread of the discourse, than injure the order of the record.

Verses 1 to 6, of the succeeding Chapter xi., describe mankind as possessed of "*one speech*," confounded, in verses 7, 8, 9, after the erection of the city of *Babel*, (*confusion*; also the name of Babylon, BAB-EL; literally "*gate of the Sun*," as we say now the "*Sublime Porte*" of the Ottoman, or "*celestial gates*" of Chinese autocracy.) But in the xth Chapter, verses 5, 20, and 31, the nations enumerated being already divided according to their respective *tongues*, LiSaN, are proofs that this Chapter x. describes the state of the world, as known to Hebrew geographers, long *after* the dispersion, no less than long *after* the Deluge; because the descendants of the only *males* who accompanied Noah into the Ark, (Chapter vii., 7, 13,) had already multiplied into fifteen main stocks, subdivided into seventy, or seventy-two (cf. WALTON, "*prolegomena I.*," paragraphs 11, 12, 14;) families or *tongues*, at the day when Chapter x. was *written*.

We are moreover told (Gen. xii., 6,) *parenthetically*, that "*the Canaanite (was) then in the land*," of Palestine; which establishes, that the displacements that eventually carried many of the Canaanitish tribes into Barbary, or *Berberia*, (ubi supra,) had not occurred in ABRAHAM's day. But we read

* Ex. gr. "*Tubal-cain*, (Gen. iv. 22,) who sharpened various tools in copper and iron;" our *ὀψοποιὸς* ΟΥΚΕΤΙΟΣ, has "*an instructor of every artificer in brass and iron*." In the xi. MSS. this name is now similarly divided; but in the oldest Hebrew MSS. or Synagogue rolls, (none extant earlier than, if as early as, A.D. 850—KENNICOTT, "*State of Text*," Diss. I. page 307; II. page 465:—or A.D. 1019; apud DE ROSSI, "*Introduzione alla Sagra Scrittura*," Parma, 1817, page 34;) as likewise in the earliest Greek MSS. of LXX. (fourth or fifth century A.D.—KENNICOTT, II. pages 407, 412:—DE ROSSI, page 47;) the letters followed each other on every line, "*continua serie*," like the Greek *Sigeian* inscription, or that of the *Rosetta Stone*, in the British Museum. See beautiful fac-similes of scriptural MSS. in that most useful and magnificent folio, "*Paléographie Universelle*;" Paris, 1841; by MM. SILVESTRE and CHAMPOLLION.

The division into *words* is a comparatively modern improvement. In consequence when examining a name which, as it stands in the *printed* copies, presents us with no definite analogy, archeological criticism has a perfect right to restore the word to its ancient state, and to replace the *letters* close together: (Cf. KENNICOTT, "*Dissertatio Generalis in Vetus Test. Heb.*," Ox. 1780, sect. 28, page 13.)

Tubal-cain thereby becomes again THUBLKIN. I suggest its division into THU BLKIN. In the first word we have the equivalent of the Arabic THU, DhU, alias ZU, meaning a *God*; as in *Dhū-Karnaim*, the "*God with the two horns*," (*Ashoroth Karnaim* of 1st Sam. xxxi. 10; Jerem. 44, 19, &c.) or as in *Dhū-Nawāz* the "*God of Nysa*," Nysæus, Διονυσος; both names of the bisexual or *androgynous* Bacchus. In the second, B and V of Oriental languages being transmutable, I read VuLKIN, and obtain at once Thu VuLKIN, the "*God-Vulcan*;" the celestial blacksmith of classic mythology, degraded from the primitive Egyptian philosophical conception of *Phthu*, the deniourgos, or *artisan-power* of creation.

This may appear to the reader a mere hap-hazard coincidence. It is a poor rule which cannot support itself by numerous examples; and having collected many such, I defer their production to another occasion.

(Chapter x. 18,) that "afterwards the families of the Canaanites were *spread* (abroad):" which proves that, when the xth Chapter of Genesis was *written*, these displacements had *already taken place*.

Now from Numbers xxxiv. we gather that, in the days of MOSES, (say the fifteenth century B.C.) the Canaanites had not been yet expelled: *ergo* the xth Chapter of Genesis, which already speaks of their displacement as a *past event*, (v. 18,) was *written after* Israel had subjugated Palestine. But the hosts of Israel did not conquer Palestine, nor expel any Canaanites, until the times of JOSHUA; and therefore the xth Chapter of Genesis was *written after* JOSHUA's day. It is not then a document compiled at the anterior Mosaic epoch. Its position is an anachronism where it now stands, *parenthetically*, between the ixth and the xith Chapters of Genesis; and it exhibits the state of Palestine, as it *had been* previously to the expulsion of the Canaanites. Its probable age of composition will be discussed, inasmuch as the elucidation requires a different course of argument, *in extenso* at a future day. Meanwhile the reader may consult the still more recent books, (Judges i. 21, 28 :—1st Sam. vii. 14 :—2nd Sam. xxiv. 7 :—1st Kings, ix, 20, 21; "unto *this* day :—2nd Kings, viii, 6 :—Esra, ix, 1, 2 :) to observe, that *all* the families of the Canaanite not having been expelled, nor subjugated, even in times subsequent to the return from the Captivity, say the sixth century B.C., when their relics merged into the new Hebrew community, we cannot expect to find *all* of their ancient cognomina among the traditionary patronymes of the *Berbers* of Libya.

The present pages have extended far beyond the limits prescribed to myself when I began this Excursus; and yet, in connection with the importance of *Arabic* to the hierologist, in re-constructing the geography of the inhabitants of the *Nubias* and the *Upper Nile*, in the days of the xiith and xviith dynasties, or between 3,000 and 4,200 years ago, I wish to advert to one method of restoration of peculiar moment and utility.

Six years back, (*Lectures*, 1842; *Chapters*, 1843, page 44,) I advanced the opinion, "that the Pharaonic Governments were better acquainted with Nigritia 3,500 years ago, than any geographers of modern times, who have gone little beyond the legendary fragments bequeathed to us, 2,000 years ago, by Eratosthenes."

The researches of the enterprising and learned traveller Dr. BEKE* have unfolded new and most important views upon the Southern extension of the various streams that unite to compose the *Bâhr-el-Abiad*; at the same time that the invaluable investigations of Mr. BIRCH into the hieroglyphical names of African tribes, extant upon the monuments, are calculated to confirm the opinion above quoted on the geographical knowledge of the hierogrammatists.

7 As developed in a memoir read before the *Syro-Egyptian Society*; London, 9th Jan., 1849: and since published in the *Literary Gazette*, 20th Jan., 1849. See on Lake *Tsana*, or *Coloë* of Ptolemy, BEKE, "Mémoire Justificatif"—*Bulletin de la Société de Géographie*, 1848, pages 52, 61; and "Plan de la Source de l'Abaï."—IBID, "On the Nile and its Tributaries," *Jour. R. Geog. Soc.*, 1847; vol. XVII., pages 70, 71—"Lake *N'yassi*, great Lake of Southern Africa; *Zambeze* of the Portuguese."—Also in the same Journal, vol. XV., DESBOROUGH COOLEY, on the "Geography of *N'yassi*."

In a paper on the African captives of AMUNOPH III., 4th year, recorded at *Soleb* in Nubia, and on the pedestal of this king's statue at Paris, ("Archæologia," vol. xix. pages 489—491;) Mr. BIRCH made the following critical observation:—"In the syllable PA is apparently, from its repetition in several names, an Æthiopic form: and the word TARU, or TALU, commencing the appellative of several tribes, seems a genuine Æthiopic term?"—"page 491, note a. Thus; *Taru-taru*, or *Tar-tar*; [WILKINSON, Mat. Hier. Supp. viii., 23:] *Taru*, or *Tar-Sena*; [IBID., 29:] *Tar-Benka*; [IBID., 30:] *Tur-Ru*, Conquests of SETHI I.; [ROSELLINI, Mon. Stor., Tomo iii., Parte i., Pl. lxi., 15.]"

The perusal of Mr. BIRCH's paper suggested to me, in 1846, the probability that (T and D, no less than L and R, being interchangeable in the phonetic system of Egyptian hierogrammatists,) if we read the Arabic "*Dâr*," *house*, *habitation*, "districts occupied by nations," in lieu of the transcription, *Tar*, or *Tal*, we should find the generic prefix which is still current among Nubian populations; as in the names *DAR-Foor*, *DAR-el-Bert*, *DAR-Halfaya*, &c. I instanced the *DAR-el-Mahas* as the present titular representative of the people named, at Aboosimbel, in the legend, "discourse of Horus, Lord of the *Maha*-country, (ROSELLINI, Mon. Stor., vol. iii., part ii., page 170; Pl. M.R. 77, fig. 2;) in conversations with Mr. BIRCH, and in correspondence with Mr. A. C. HARRIS, of Alexandria, relative to the *Tablet* of the age of SETHOS-MENEPHTHA I., discovered by him at Ibrim in Nubia in Dec., 1845: (Trans. R. Soc. of Literature, vol. i., No. 16, 25th June, 1846—photographed by the courtesy of Mr. H. FOX TALBOT.)

The absence of correct *Maps* of Nubia, specifying with accuracy the *names* and topographical positions of the multiform tribes inhabiting its wide superficies suspended further inquiries; but the reception of RUSSEGER's splendid "*Karte von Ost-Sudan*," 1843, having recently recalled the subject, I have no doubt that among the innumerable "*Dârs*" therein presented, Mr. BIRCH's skilful eye will recognize many African nations of Pharaonic annals; at the same time that Dr. BEKE's researches into Upper Nilotic regions may enhance the probability, that the *great Austral Lake*, (not that of *Dembea*, or the *Tsana*, but further South, the *N'yassi*,) accounts of which have reached him from various native sources, may be the "*great Lake*," which the Pharaohs of the xviiith dynasty visited in their remote Nigritian expeditions.

Finally, that the student of Nubian, Soodanian, and Austro-Libyan ethnography, may be convinced, that there are materials through which Egyptian hieroglyphics can be made to shed new and immense light, where heretofore all has been enveloped, like the yet-unknown sources of the Nile itself, in gloom, fable, and uncertainty, I append a list of Mr. BIRCH's readings of some *names* of nations south of Egypt, extant on the monuments of the xiiith, and xviiith dynasties: whose epochs range between the twenty-third and and the fourteenth centuries, B.C.

Most, I may say, of these family nomenclatures have been already identified, by the same crude palæographer, with classical geography. Some of the coincidences, between these cognomina and those visible in modern maps, (the BARABARA, or *Berbers*; the TEKRUR, or *Dakroorians*;) have been pointed out by ROSELLINI, CHAMPOLLION, CHERUBINI, and others. Did time and

space permit, I could at once indicate a few more analogies; but without presenting the *hieroglyphics*, which are susceptible of various modifications in English transcription, and accompanying them with a map containing simultaneously the monumental, classical, Arabian, and modern appellatives, the labor would possess little practical utility.

In the hope that, in the interim, the achievement of this grand desideratum will be undertaken by those whose positions, qualifications, and ampler facilities, ensure greater prospects of success, I must be content to postpone the public resumption of my own inquiries into these most interesting branches of ethnological science to a future opportunity.

Mr. Birch's catalogue of *Æthiopian* and *Nigritian* names.

I. OSORTASEN I.—xiith Dyn.

Tablet of Wady Hälfa.

- | | |
|----------------------|---------------------------------------|
| 1. Kas, or Gas. | 4. Shaat. |
| 2. Shemki, or Temki. | 5. Khilukai ; perhaps the Shilougis ? |
| 3. Chasaa. | (<i>Rosellini</i> , M. R. xxv., 4.) |

II. AMENOPHIS III.—xviiiith Dyn.

1st List.

Owing to the uncritical manner in which the prisoners at Soleb have been copied, it is impossible to know whether particular names are those of the Hamitic or Semitic people. Among those apparently *Æthiopian* are,

- | | |
|--|---|
| 1. Serunik, (No. 2.) | 7. Turusu, (24.) |
| 2. Karuses, (4) | 8. Taru Sinu, (29.) |
| 3. Shani, (5.) | 9. Taru Benka, (30.) |
| 4. Buka, (10.) <i>Boggees, Bégas ?</i> | 10. Aken, (24.) |
| 5. Shan, (11.) | (<i>Wilh.</i> , Mat. Hier. Suppt. Pl. viii.) |
| 6. Taru-Taru, (23.) | |

2nd List.

On the Pedestal at Paris.

- | | |
|---------------------------|---|
| 1. Kish, (Chas.) | 15. Kaba. |
| 2. Pite, or <i>Kens</i> . | 16. Akhai Hept. |
| 3. [erased.] | 17. Aruka. |
| 4. [erased.] | 18. Makaiusah. |
| 5. Pa-Maui. | 19. Matakarhu. |
| 6. Pa-Gamakui. | 20. Sahaba. |
| 8. Waruki. | 21. Sahbaru. |
| 9. Taru Hept. | 22. Rei gem teka. |
| 10. Buru. | 23. Abheta. |
| — several names erased. | 24. Turusu. |
| 12. Kish (Chas.) | 25. Shaurashak. |
| 13. [erased.] | 26. Akenes. |
| 14. [erased.] | (<i>Archæologia</i> , xix. p. 489—91.) |

3rd List.

On the Tablet at Elephantine.

- | | |
|-------------------------|--|
| 1. Ark. | 3. Mar (a water place.) Meroë ? |
| 2. Ur. (a water place.) | (<i>Champollion</i> , Notices, p. 164.) |

III. SETHOI I.—xviii th Dyn.

1st List.

- | | |
|---------------|--|
| 1. Kish—Kush. | 4. Amru Karka. |
| 2. Ataru. | 5. Buka. |
| 3. Arukhan. | (<i>Wilk.</i> , Mat. Hier. Pl. viii.) |

2nd List.

- | | |
|------------|------------------|
| 1. Kush. | 5. Kar-ses. |
| 2. Khaui. | 6. Akatar. |
| 3. Tar-wa. | (<i>Ibid.</i>) |
| 4. Atar. | |

3rd List.

- | | |
|-----------------|---|
| 1. South. | 8. Baru-baru. |
| 2. Kush. | 9. Tek-rur. |
| 3. Ataru. | 10. Mar ? |
| 4. Arushaki. | 11. Kar-ses. |
| 5. Am-ru Karka, | 12. Ark. |
| 6. Buka. | 13. Tur-ru-Ru, |
| 7. Seruni. | (<i>At Karnak. Ros.</i> , M. St. lxi.) |

IV. RAMESES II.

- | | |
|------------|--|
| 1. Kush. | 5. Buru-buru. |
| 2. Ataru. | 6. Mari. |
| 3. Arukau. | (<i>Wilk.</i> , Mat. Hier. Pl. viii.) |
| 4. Khaui. | |

V. RAMESES III.

1st List.

- | | |
|----------------|---|
| 1. South. | 7. S [erun] i ? |
| 2. Kash-Chas. | 8. Baru-baru. |
| 3. Ataru. | 9. [wanting.] |
| 4. A-khau. | 10. Mar. |
| 5. Amru karka. | (<i>Wilk.</i> , Mat. Hier., Pl. viii.) |
| 6. Buka. | |

2nd List.

- | | |
|-------------------------|--------------|
| 1. [South-erased.] | 7. [erased.] |
| 2. Kush [Chas, erased.] | 8. [erased.] |
| 3. Arukhan. | 9. Tekrurr. |
| 5. Khau. | 10. Mar. |
| 8. Buka. | |

London, Jan., 1849.

G.R.G.

APPENDIX J.

The *Rédacteur* of SCHULZ's translation of the "History of the Berbers," (*Journal Asiatique*, 1828, Tom. II., note, page 119,) as well as CASTIGLIONE, ("Recherches sur les Berbères Atlantiques," Milan, 1826; pages 83, 84,) coincides with GRABERG DE HEMSO in deeming the name of *Berber* to be derived from the Greek and Latin designations, *Barbari*, barbarians; and against such weighty authorities I would not have ventured to utter a dissentient opinion but for the fact, to all of these learned writers unknown, inasmuch as hieroglyphics were sealed books in their day, that we have the name BRBR,—the exact counterpart, letter for letter, of the *Arabic* form BRBR, or *Barabara*,—as the cognomen of Nubian, and probably Austro-Libyan nations occupying the same African territories inhabited by *Berbers* now, inscribed in hieroglyphics on the monuments of the xviii th. dyn., a thousand

years before HERODOTUS. Consequently, it is no longer possible to defend the doctrine that the indigenous and antique term *Berber* was introduced into Africa by modern and exotic Europeans.

In fact, whether the *Baràbera* families of the Upper Nile be affiliated with the *Berbers* of Libya, or not, and there are ponderous testimonies on both sides of the question, if we start in our inquiries from this very hour, we shall find that some form of the root *Berber* has been applied by all nations to parts of Nubia and Libya, at every age of which we can find records in our retrogressive march. Time and space confine me to the mere heads of an argument, it would require a volume to carry out in detail ; but the substance is this :—

1st.—All the *Arab* historians use the name *Berber*, and apply it to Libyans and Nubians, without suspecting the word to be Greek or Roman ; nor would it have comported with Muslim propriety to designate a Mohammedan people by a *Frank* and *Nazarene* name had they known it to be such. The Saracens, therefore, must have found the name *Berber* already current in *Barbary* and *Nubia*, on their invasion, without any memorial of its foreign origin.

2nd.—In the fifth and sixth centuries A.D. the countries south of Egypt, or the Nubias, are called *Barbaria* by STEPHANUS BYZANTINUS, and COSMAS INDICOPLEUSTES ; while the inhabitants of frontier Mauritania bear the appellation βαρβαριχον in the Canons of the African Church, and *Barbari* among Latin writers. The well-known five Tribes of Libyan *Berbers* are termed by the Romans “ Quinquegentani *Barbari*,” back to the fourth century A.D. (See the authorities in CASTIGLIONE, “ *Berbères Atlantiques*,” pages 86, 100, 101.)

Still retroceding, we encounter the name *Berber* in the “ *Barbaricus Sinus*,” and “ *Barbaria*” of PTOLEMY the Geographer, (Lib. IV., cap. 8, Tab. 4 ; *Aphricæ* ; ed. Rome, 1508 ;) located in the same vicinities where the entrepot of *Berberah*, and families of the Nubian *Baràbera* are met with at this day : confirmed by ARRIAN ; (“ *Erythræi Periplus*,” Geneva, 1577, sub voce ;) till we reach PLINY ; in whom we find many of the Amazirg tribes recorded afterwards by Arab authorities. The “ *Barbaris*,” (lib. v. 11 ; page 404, of *Lemaire's* edition ;) might be such. Not so the “ *Misulani*, *Subarbares*, *Massyli*,” (lib. v., 4, page 427 ;) called Σαβουρβες by PTOLEMY (lib. iv., 3). STRABO has, “ the mountain which the Greeks call Atlas, and the *barbarians*, *Dyris* ; ” the *Darah* of the present Marocchine *Berbers* ; and the *Dharæ*, or *Dharisee* of EBN KHALEDON (ubi supra, No 8 ;)—*Dyris*, *Adyris*, being the Berber name whence the Greeks derived *Atlas*, *Atlantes*, and the Arabs their *Lamta*, &c.,—but he may intend *barbarian* in the same sense in which we find it in DIODORUS (i., 160 ; ii., 75, 299 ; &c.) and in HERODOTUS, so I lay no stress on the analogy. The latter refers to the *Amazirghs*, *Mazigs*, under the name Μαζυες, (lib. iv., 191 ;) and the root *Bar*, is visible in the βαρκεασι, of βαρκη in Libya ; (lib. iii., 13 ; iv., 164, 167, &c.) the modern *Barca*.

3rd.—If the name *Barbari*, βαρβαροι, meant simply *barbarous* or *barbarians* and nothing more, why should PTOLEMY give the names “ *Barbaricus Sinus*,” and “ *Barbari*” to African places and countries where we find *Berberah* on the Indian Ocean, *Berber* the capital of Nubia, the endless ramifications of the *Berberri* or *Baràbera* tribes at this day, no less than the nations called BRBR, *Barabara*, in hieroglyphics 3400 years ago ? (ROSELLINI, M.S., Tom. iii., part 1, page 421 :—and BIRCH, “ *Gallery*,” part 2, page 89.) PTOLEMY, to be consistent, if he intended the depreciatory term *barbarian*, would scarcely have restricted its application to *Berber* countries above Egypt when the whole of Africa and Asia, not actually occupied by Roman legions, equally deserved the name ?

Having thus established the historical antiquity of the name *Berber*, it seems to me that, if the Greeks and Romans never alluded to the proper name of this most important, and best known to them, of families on the African continent, the “ *Barbari*” ought now to lie on the adverse side of the discussion.—G.R.G.

POSTSCRIPTUM.

THE subject of *Slavery*, one that has been perpetually before me in the Levant and in the West, displayed among most human races, and in all its forms—a theme upon which every body writes, and with the elementary as well as philosophical history of which so few are acquainted,—will receive development hereafter; when leisure admits of my arranging the materials collected during twenty-five years of personal observation. Meanwhile, a remark of LAYARD suggests the following commentary, in which the general reader may perhaps find some novel matter. It is said by this Orientalist,—“that *Eunuchs* were also an object of trade, and were brought, as at this day, from the *centre of Africa*, we learn from Jeremiah xxxviii, 7th;” (“*Nineveh*,” vol. II., note, page 325.)

With regret I must controvert the whole of this assertion, beyond the fact that *Eunuchs* may have been anciently “an object of trade.”

In no part of the Hebrew Scriptures are *Negro* races, nor is *central Africa* alluded to; the Greek word “*Æthiopia*,” being a false translation of the Hebrew “*Cush*.” In this passage of Jeremiah we read that, ABED-MELEK was a *Cushite*; that is, an *Arabian*, and consequently a white-man, or Caucasian; not an African, far less a *Negro*. His cognomen, literally *Slave-of-the-King*, is a proper name; like ABI-MELEK, ABI-MELEK, ancient Israelites, or ABD-ALLAH, *Slave-of-God*, among the Moslems. AISH SaRIS, *homo castratus*, declares his emasculation.

ABD-MELEK, probably a *Hebrew Slave* (sanctioned by Mosaic institutions, Exod. xxi., 26; Levit. xxv., 39-44; Deut. xv., 12-18;) as well as an *Eunuch*, was an emasculated whiteman; exactly similar to those so admirably portrayed in the Assyrian sculptures we owe to BOTTA, (“*Lettres de Khorsabâd*,” 1845;) and to LAYARD, (vol. II., pages 468, 469, &c.); no less than to FLANDIN, (“*Monument de Ninive*,” Pl. 18, 19, 22, 121, 129, 138, &c.) These SaRISim, *Eunuchs*, were constantly attendants upon *Jewish*, (1st Sam. viii., 15; 1st Kings, xxii., 9; 2nd Kings, xxiv., 12, 15; xxv., 19;) as well as on Chaldean sovereigns; (2nd Kings xviii., 17; Esther, i., 10, 12, 15; Jeremiah, xxxix., 3; Daniel, i. 3; &c.) Our unfaithful translators have softened the asperities of the original, by mildly rendering these SaRISim, as if they were merely *officers, chamberlains*! Mosaic laws forbade not the manufacture, but simply excluded *Eunuchs* from the congregation; (Deut. xxiii., 1;) for which, in after times, prophetic humanity offered spiritual compensation: (Isaiah lvi., 3. 5.)

By the LXX. the term SaRIS is rendered *ευνουχος*; with but two exceptions, when its substitute is *σπαδων*. The derivation of the word *Eunuch* is *ευνην χει*—*lecti curam habet*—or “custodian of the bed.” Great respect was often paid to them anciently, owing to their familiar access to the privacy of magnates, in the same manner as is lamentably customary throughout the modern Ottoman empire. Thus HERODOTUS informs us, that in Persia, *Eunuchs* were promoted to the highest honors; a statement that derives curious confirmation from hieroglyphical discoveries; for, on the Tablets of the Persian epoch on the Cosseyr, the word *Phurs* reads “SaRIS (en) *Phurs*”—the *Eunuch of Persia*—as the title of the dignitaries who there record their consecutive passage: (BURTON’S *Excerpta*; Pl. VIII., and Pl. XIV., fig. 2, 3.) And besides abundant later instances, it is notorious that *Bagoas* exerted great influence over ALEXANDER; another of the same name (or title?) over ARTAXERXES OCHUS; *Menophiles* over MITHRIDATES; *Photinus* over the last PROLEMY; *Phileterus* over LYSIMACHUS; *Sporus* over NERO; &c., &c. Even ARISTOTLE paid court to *Hermias*; and *Narses* was a General in the Byzantian army. Yet earlier Roman law had deprived *Eunuchs* of the power of bearing witness, and holding office.

The existence of *white Eunuchs* being thus established in Europe, Palestine, Assyria, Asia Minor, and Persia, if we turn to Egypt, an incident in JOSEPH’S remarkable life finds easy solution in the fact, that POTIPHAR himself was the “*Eunuch of Pharaoh*,” SaRIS PHARAH. (Gen. xxxvii., 36; xxxix., 1.) The philologist cannot avoid this textual dilemma; for SaRIS, cognate with the Arabic SaReS, *castratio*, and Persian SaRiS, *impotens*, means *Eunuch* and nothing else. At this day it is not unusual for opulent *Eunuchs* in the East to possess *Harems*.

That the Pharaonic Egyptians, from very early times, manufactured *Eunuchs* is attested by MANETHO, (Cory, page 110;) who speaks of their assassination of AME-

NEMES of the xiith. dyn., as if these equivocal creatures had long been common about the court : and representations of *Eunuchs* may with great plausibility, if not with certainty, be pointed out on the monuments as far back at least as times prior to HORUS of the xviith dyn. ; say the sixteenth century B.C. : (Tomb of *Qoonet-murraée* ; age, AMUNTUONCH ; figures of the *Egyptians* who attend the Nigritian princess ; WILKINSON, "Topog. of Thebes," page 135 :—"Man. and Cus.," I. page 404 ; and III. page 179.—See other examples in ROSELLINI, "Mon. Civ." vol. III. page 133 &c.) But, all these Egyptian *Eunuchs*, if they be such, are painted *red*, and in physical characteristics are strictly *Egyptians* and *Caucasians* ; (MORTON, "Crania *Egyptiaca*," *Conclusions*, page 66 :) and there is not a single Negro or *African Eunuch* to be found on the monuments of the Nile.

If we turn to the Mongolian families it becomes evident, that of all countries, save the modern Ottoman Empire, *China* has suffered the severest retribution for permitting an atrocity that recoils with terrific vengeance on the heads of its perpetrators : (PAUTHIER, "China," pages 265, 326, 330, 395, 464, 465, 434.) Yet the myriads of *Eunuchs* in the Celestial Empire were *Chinamen*, never Negroes : any more than were the 20,000 unhappy wretches whom TAVERNIER tells us were yearly manufactured in *Boutan*.

I am unable to aver that *Eunuchs* are depicted on Etruscan remains ; but, until the xixth century, A.D., Roman orthodoxy has delighted in the sacred melodies of Italian *Musici* : while to Naples is particularly ascribed the latest practice of this barbarous art : and it is necessary to ransack Church History for individual instances. Of *Matthew*, xix, 12. The Council of Nice forbade the admission of *Eunuchs* into holy orders ; but the *Vaalesians* were a Christian sect in the 3rd century, and report attributes a similar idiosyncrasy to present times in *Russia*.

Now, in all the nations above enumerated, there is not a solitary instance of a *Nigritian Eunuch*, nor of any such ancient trade with central *Africa*. Alas ! the vile institution is *Asiatic* in its origin ; and the curse may well lie upon the grave of *Semiramis* : (LAYARD, II., page 325.) *African Eunuchs* belong to modern, not to ancient history.

Here I must pause. The reader need not be told, that thousands of Circassian, Georgian, Greek, Nestorian, and other varieties of white *Eunuchs*, besides Abyssinians, Negroes, and similar *African Eunuchs*, have been employed in the Hareems of the Turk ; for whom hundreds are still to be seen in *Constantinople* and *Africa* ; in which last country above Egypt, but one in twenty survive the horrible system of operation.—Q. E. D.

When it was politically expedient to pet the individual ambitions and fan the cant of "Exeter Hall," through the *niaiserie*s of which the dreadful abominations of the Atlantic slave-trade have in these last four years been multiplied tenfold, (while the attention of British philanthropy is dexterously withdrawn from the Mediterranean, Black Sea, and inland caravan slave-trade of male and female *Asiatics* and *Nigritians*, to waste itself in mawkish sentimentalities derided in the United States,) an "Imperial Firman" was "got up" at Constantinople, on the 13th Feb. 1841, "addressed to MOHAMMED ALI, conferring upon him the Government of Nubia, Darfoor, (why not have added that of the *moon*, for this satellite is equally accessible to Egyptian armies ?) Kordofan, and Sennaar, and enjoining him to abolish the *Negro-hunts*," &c. It moreover added, "this custom, as well as that of reducing some of the said captives to the condition of *Eunuchs*, is in all respects contrary to my Imperial will." (! Did the Sultan abolish his own *Eunuchs* ? has there been one *African slave* less in Turkey ?)

I was at Cairo when this *Firman* was issued. A document arrived to be scorned by the Pasha, and laughed at. A few days later came a new *Firman*, issued by the former, agreed to by the Allies, and ratified by the Viceroy. Not only did it abolish the *Slave-hunts*, or *Eunuchs*. ("Parliamentary Papers ; " Affairs of the Levant, 18th Aug. to 7th Oct. 1841 ; vol. viii.—Compare pages 250, 251, with pages 434 to 434.)—March, 1849.—G.R.G.



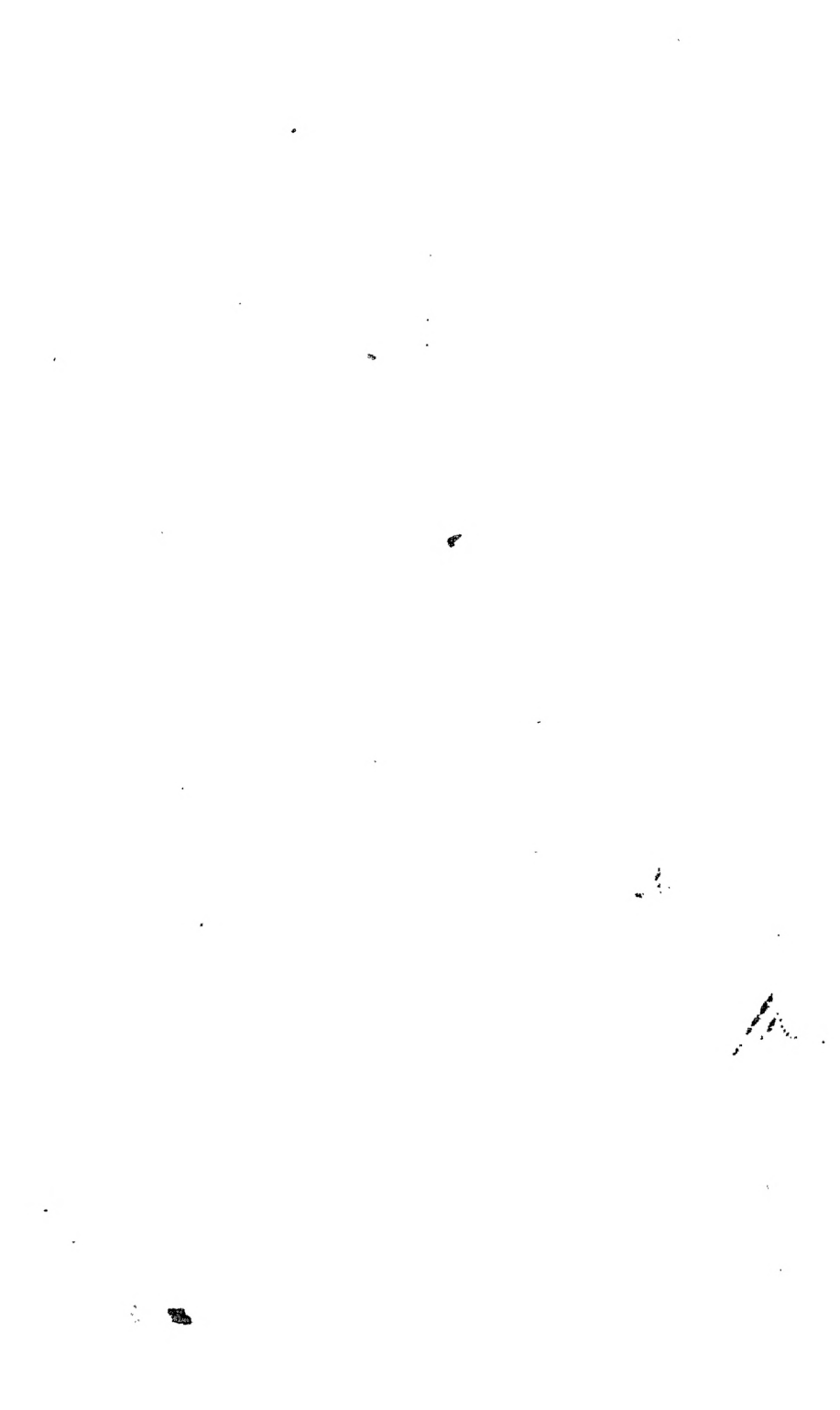
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15	36	"	give	"	gives.
16	13	"	hat	"	that.
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38	35-36	"	after " Authority")	"	after " months.")
47 note	9, 7	"	Moers	"	Moeris.
47	13	"	Phisops Apappu	"	Phisops Apappus.
48 note	18, 22	"	Labyrnth	"	Labyrinth.
52 note	21	"	obsdian	"	obsidian.
54 note	4	"	etylomology	"	etymology.
58 note	32	"	WILKINSON	"	WILKINSON.
59 note	7	"	Lotuse	"	Lotuses.
62	4	"	derivation	"	deviation.
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67	2	"	topography	"	topography.
68	16	"	Africa to Asia	"	Asia to Africa.
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78	6	"	page 363	"	page 74.
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103	54	"	view, have	"	view, I have.
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106	36	"	l'Egypte	"	de l'Egypte.
107	32	"	monuments	"	monument.
110 note	23	"	FERGUSON	"	FERGUSON.
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